

University news

A CHRONICLE OF HIGHER EDUCATION & RESEARCH JUNE 1, 1977 80 PAISE



West German Foreign Minister, Mr. Hans-Dietrich Genscher, receiving the honorary degree of Doctor of Science (Honoris Causa) from Mr. G. Narayanamurthi, Acting Director of IIT, Madras at a special convocation held at IIT Madras.

CLASSIFIED ADVERTISEMENTS

GURU NANAK DEV UNIVERSITY AMRITSAR

Advertisement No. 8/77

Applications are invited for the following posts on prescribed form obtainable (free of cost) from office of the Registrar, Guru Nanak Dev University, Amritsar by making a written request accompanied by a self-addressed stamped envelope of 23x10 cms. so as to reach this office by June 14, 1977 from persons residing in India and by June 21, 1977 from persons residing in foreign countries, alongwith crossed postal order (s) for Rs. 7.50 drawn in favour of the Registrar, Guru Nanak Dev University, Amritsar. Application fee is not refundable.

NOTE: Persons already in employment must send their applications through their employer.

Grade (plus allowances as admissible under University rules).

1. **Professors** (Grade Rs. 1500-60-1800-100-2000-125.2-2500) in Chemistry, Physics, Economics, Mathematics, Political Science and Sociology.
2. **Readers** (Grade Rs. 1200-50-1300-60-1900) in Biology, Chemistry, Physics, Psychology, Economics, History, Punjabi, Law, Political Science and Hindi.
3. **Lecturers** (Grade Rs. 700-40-1100-50-1600) in Biology, Physics, English, History, Law, Political Science, Mathematics (Statistics), Sociology, Russian, German, Persian. Lecturers in Commerce for University Evening College, Jullundur.

QUALIFICATIONS:

For the posts of Professors and Readers

- (i) A Doctor's degree or published work of an equally high standard; and
- (ii) consistently good academic record with 1st or high 2nd Class (b+) Master's degree in relevant subject or an equivalent degree of a foreign University; (iii) About 10 years' experience of teaching post-graduate classes and guiding research in the case of Professors. About 5 years' experience of teaching post-graduate classes and post-doctoral research work in case of Readers. (iv) Knowledge of Punjabi and a foreign language other than English will be an additional qualification.

For the posts of Lecturers:

- (i) A Doctor's degree or published work of an equally high standard; and
- (ii) Consistently good academic record with 1st or high 2nd Class (b+) Master's degree in the relevant subject or an equivalent degree of a foreign University; (iii) Teaching/research experience and knowledge of Punjabi and a foreign language other than English will be additional qualifications.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of the qualifications prescribed in (ii) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent published work is not available or is not considered suitable, a person possess-

(due weightage being given to M. Phil. or equivalent degree or research work of quality) may be appointed on the condition that he will be able to obtain a Doctor's degree or give evidence of published work of equivalent high standard within five years of his appointment, failing which he will not be able to earn future increments until he fulfils these requirements.

EXPLANATION: Consistently good academic record means overall record of all assessments throughout the academic career leading to Master's degree, which should at least be b+ or high Second Class.

SPECIALIZATION

CHEMISTRY: Professor: (i) X-Ray Diffraction for structural elucidation of molecules. (ii) Quantum Chemistry or Theoretical Chemistry.

Readers: Thermodynamics and Quantum Chemistry or Organic Chemistry.

PHYSICS: Professor: Experimental solid state Physics: modern spectroscopy including magnetic resonance & high resolution spectroscopy. **Reader:** Modern Spectroscopy/experimental solid state Physics. **Lecturers:** Nuclear theory, solid state theory, experimental nuclear Physics, experimental solid state Physics and spectroscopy.

ECONOMICS: Professor: Macro Economic theory and money and banking with good grounding in quantitative methods. **Readers:** Economic Statistics with strong Mathematical background.

POLITICAL SCIENCE: Professor: Political Theory or International Politics. **Readers:** Public Administration (possession of a Master's degree in Public Administration is desirable).

BIOLOGY: Readers & Lecturers: Ecology/Animal Physiology/Plant Physiology/Chemistry/Genetics/Biology/Molecular Biology/Microbial Genetics or any other modern and interdisciplinary area in Biology.

PSYCHOLOGY: Reader: Experimental Psychology, preferably in the area of learning, perception, personality, cognition, motivation and Psychopharmacology.

HISTORY: Reader: (i) Modern Indian History. **Lecturer:** (i) Medieval Indian History.

LAW: Readers: Constitutional Law, Family Law, Lecturer: Property Law and International Law.

HINDI: Reader: Medieval Literature & Philosophy and History of Hindi Literature/Linguistics and stylistics/Modernity and Aesthetics.

ENGLISH: Lecturer: Linguistics in addition to British Literature. **MATHEMATICS:** Lecturer (Statistics): Knowledge of Computer Programming/Operational research/Bio-Statistics, Econometric. **SOCIOLOGY:** Lecturer: Social Psychology/Family & Kinship.

Registrar

LUCKNOW UNIVERSITY

Advertisement No. 10/1977

Applications are invited for the follow-

Lucknow University:

1. One Professor of Medical Chemistry and Chemical Pharmacology in the Department of Pharmacology & Therapeutics in the grade of Rs. 1200-50-1500-1800.

QUALIFICATIONS:

Essential: M.Sc. (Organic Chemistry) or M.Sc. (Biochemistry) and Ph.D. or D.Sc. in Biochemistry or Organic Chemistry.

Candidates must possess five years' teaching experience in the subject concerned as Reader or in an equivalent post.

Private consulting practice not allowed but if the candidates also possess medical qualifications viz. M.D./M.S. F.R.C.S./M.R.C.O.G. or equivalent, they will be paid non-practising pay a 25% of the pay and non-practising allowance @ 25% of the pay subject to a maximum of Rs. 300/- in each case.

2. One temporary Professor of Dentistry (Pedodontia) in the Department of Dentistry in the grade of Rs. 1200-50-1500-1800.

QUALIFICATIONS:

Essential: B.D.S. or equivalent qualification with a good academic record and post-graduate qualifications (M.D.S.) or its equivalent.

Candidates must possess five years' teaching experience in the subject concerned as Reader or in an equivalent post.

Consulting practice in the specialty allowed provided it does not interfere with the official duties. The University will, however, be free to restrict or abolish consulting practice altogether at its discretion in which case the prescribed non-practising pay and non-practising allowance, will be given.

GENERAL:

For purposes of qualifications for the above posts, the degrees obtained in a subject taught in a Department which is subsequently constituted into separate department, shall be deemed to be degrees in the subject concerned, for the newly constituted department.

Special training or experience in the specialty concerned, shall be an additional essential qualification.

Relaxation in the prescribed qualifications may be made in exceptional circumstances in accordance with the Ordinances.

Benefits of Provident Fund available for post No. 1 as admissible under the rules, on confirmation. Period of probation for the post is one year.

The University reserves the right to fill both of the advertised posts.

Applications in the prescribed form (available on request, free of cost), from the office of the Registrar, with a self-addressed envelope 23 cm. x 10 cm. with recent testimonials, publications etc. should reach the Registrar, Lucknow University by Saturday June 25, 1977. Candidates who are in service should send their applications through proper channel. Application forms to be obtained, will be issued upto Friday June 17, 1977.

Sd/-
(B. N. Sinha)

UNIVERSITY NEWS

Vol. XV JUNE 1
No. 11 1977

A Fortnightly Chronicle of Higher Education Price 80 Paise

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Editor : ANJNI KUMAR

Problems of Illiteracy

R. C. Mehrotra*

Literacy and National Development

In developing countries like India, there is an increasing concern about the seriously adverse effects of illiteracy on the economic, social and political development of the nation. Efficiency and productivity of the farmer in the field or the worker in the factory appear to be markedly influenced by his capacity to acquire knowledge and skills through education and training which is not possible without his being literate. With the immensity and complexity of problems in our country, separate attempts to break the vicious circle between underdevelopment and inequality in educational opportunities have been doomed to failure from the very start. Consequently, the need for an integrated approach which attempts to deal with both of these problems jointly is beginning to be realized more and more.

Before I proceed any further, let me clarify that although literacy and education can serve as the most important catalysts for social change and economic development, yet there is no direct correlation between the literacy or even education of a person on the one hand and his social outlook, innate wisdom and capacity to take decisions on the other. The illiterate masses of different regions in the world have throughout history displayed a surprising awareness of the problems of the society around them and have contributed even with their empirical knowledge significantly to the advancement of techniques in their individual professions.

It must, however, be admitted that there has been in the past few decades a phenomenal rate of increase in the quantum of human and social knowledge in all fields and the society is becoming more and more dependent on the extremely rapid advances in the fields of science and technology, not only in areas of productivity and economic growth but more recently, even in the quality of life itself in such all pervading aspects such as availability of fresh air to breathe and clean water to drink. In order that the human society is able to face the new challenges in a meaningful manner, it is becoming more and more imperative that there is a clearer understanding and appreciation of the problems in the masses of society. It must be admitted that mere literacy would not be sufficient in these directions, but capacity to read and write does make an individual autonomous in his access to knowledge. In fact, as is true in all aspects and stages of education, a thirst for knowledge and desire to continue to add to one's understanding are of much greater importance than mere introduction to the 3R's. The passion for knowledge thus aroused would help the parents in overcoming the immediate greed which tempts them to keep their children away from school

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for the short-time benefit of manual help from them to the family. In fact, some UNESCO studies have shown that even the education of children is more effective when their parents appreciate the value of knowledge and awareness of the growing complexities of the presently fastly developing complex society.

When India got her independence in 1947, the percentage of literacy was as low as 14, which meant that out of a population of approximately 40 crores, more than 34 crores were illiterate. According to the present estimates, the percentage of literacy has increased to about 35 which, when translated into actual figures, means that out of a population of about 60 crores approximately 39 crores continue to be in the illiterate group. These figures clearly affirm that in spite of the policy adopted in the Constitution for universalization of primary education by 1960 and also in spite of numerous efforts for adult literacy by different agencies, the total number of illiterates in the country instead of diminishing has increased from 34 to 39 crores. What is even more painful and even shocking to a nation, rightly proud of its cultural heritage, is the fact that this high figure of 39 crore illiterates represents approximately half of the total number of illiterates in the entire world. Let me, however, before ending this statistical analysis on merely a pessimistic note emphasize the fact that starting with nearly 5 crore literates in 1947, we have today in the country more than 18 crore literates, after making an allowance for the number of very young children. This depicts an impressive growth rate of about 45 lac literates per year in the country during the last three decades.

Status of Illiteracy in the World

This brings me to a brief review of the status of illiteracy in the world as a whole. In 1971, the number of illiterates in the world was estimated to be about 78 crores. In spite of massive efforts at the national and international levels at increasing the provisions for primary schooling and adult literacy, the number of illiterates in the world instead of falling, is estimated to increase to about 82 crores by 1980. Obviously, these illiterates are not spread evenly in the world, but they are more concentrated as could be expected in the developing regions. Three-fourth's of them are to be found in Asia, where these constitute about half the adult population. A further fifth are in Africa. The remaining 5% are distributed between Latin America, Europe and North America etc. In Asia itself, the percentage of adult illiteracy was estimated in 1971 to range from 88 in South Korea to 23 in Bangla Desh, with India standing nearly at the bottom at 29%. In addition to the heterogeneous distribution in the population as a whole, discrepancy in male and female literacy is also universal. A second general dichotomy exists between the rural and urban areas and the third difference is between the rich and the poor. In short, the highest incidence and increasing rates

of illiteracy are usually to be found among the women, the rural and the poor, which are precisely the groups crucial in population planning and rural development. In its publication, entitled 'Literacy 1969-71' the UNESCO has drawn a depressing conclusion that 'despite steady gains, world adult illiteracy is not a problem that will be solved during the 20th century'. It has been further concluded in this document that despite growing expenditure on schools, the literacy gap cannot be bridged by the formal school system alone.

This brings us to the importance of tackling the problem of illiteracy outside the formal school system. It is only in a few countries where the governments have supported literacy campaigns on a mass scale. Outstanding examples, in terms of total population coverage, have been the mass campaigns in countries like Cuba, China, Russia, Indonesia and Yugoslavia. In Cuba, formal education in the secondary schools and universities was actually suspended for some years to enable students and teachers to devote their full-time in the literacy campaign. In China, a notable feature has been the emphasis on literacy programmes for women in which even middle school students participated in a very effective manner.

Need for a Mass Literacy Campaign

In India a few mass literacy campaigns, inspired by Mahatma Gandhi were initiated by the Congress Governments which came into being for a short while in 1937. However, since 1947 much greater stress has been placed in free India on the universalization of primary education. Provision was, therefore, made for free compulsory primary education even in the Constitution itself. In spite of considerable efforts in this direction, the target of 100% primary education by the year 1960 has not been even so far achieved. In addition to the problem of initial enrolment, the factors of stagnation and wastage continue to affect adversely the overall achievements in enrolments. Unfortunately, these latter deleterious effects are also more prominent in poorer regions. Obviously, efforts in all these directions should certainly not only be continued, but will have to be accelerated for achieving the targets as early as possible. In addition, it is absolutely essential that as a complementary programme, much greater stress should be laid on organized efforts for Mass Adult Literacy under an overall extensive Mass Adult Education Programme. The principal agencies responsible for organizing and conducting the Adult Literacy work have been the State Governments with the financial and other assistance from the Central Government. In addition, the Central Government has since 1953-54 been giving assistance to voluntary organizations on the basis of an increasing proportions of their expenditure.

All these efforts put together have certainly been able to make a dent, but the over-all progress has been far from satisfactory. Recent statistics for twenty countries have shown that the number of illiterates continues to be on the increase in countries with illi-

teracy rate of 70% or above, but it tends to decrease in regions where the figure is below 35%. These two figures thus seem to constitute two critical thresholds. It can therefore, he inferred that in any country the struggle against illiteracy can be deemed as succeeding only when the percentage of illiterates is brought below 35%. This obviously points to the essential need of a much more organised and concentrated multi-pronged attack on the problem in the initial stages till the percentage is brought below the critical limit of 35%. There are two obvious ways of dealing with the problem. The first could be through the provision of adequate financial requirements from the public exchequer, but this approach alone cannot be successful as the amounts of inputs required, even at a modest scale of Rs. 50 to 100 per adult, would become prohibitive for the present economy of the country. The second course is to coordinate the official efforts with voluntary services on the basis of a mass movement in the country. Out of many efforts on a mass scale attempted in the different parts of the country, the mass approach of Gram Shiksha Mohim of Maharashtra is worthy of special mention. In this project, the whole village has been taken as a unit for the literacy effort and the objective is to make the entire village literate in about a year or so. The main approach of this is that the village community is actively associated with the project and voluntary contributions from the village itself tend to reduce the overall external inputs required. Much greater emphasis is placed in this programme on the motivation for literacy being created by the decision of the people themselves to become literate. It is they who impel the teachers to make them literate instead of the teacher persuading the illiterates to come to the literacy classes as is the case in the usual programmes of literacy. Organized in a competitive manner, the movement has a naturally contagious effect as no village likes to lag behind its neighbour in such a programme of self-improvement and development. Finally the shortage of qualified teachers is overcome by enlisting enthusiastic educated volunteers and even children studying in higher classes who are given a brief orientation programme. For a voluntary mass movement of this type, the willing and enthusiastic cooperation of teachers and students at various levels is absolutely essential. With about 35 million students, including approximately 20 million at the middle school level, 11 million at a High School level and 4 million at the College level, we have an army which if motivated to make 10 adult per person literate in a year could wipe off illiteracy from the face of the country. Of course, the time taken would be proportionately higher if the actual number of adults who could be made literate by each student and teacher falls below 10, but even if the percentage of literacy could be brought below the 35% critical threshold within a year or two, it would be a great achievement. There are already liberal provisions for free-ships and other facilities for students at various levels. If these could be tagged on to the amount of effort put in this task of

national importance and the students could be recompensated for such efforts, then there can be some in-built incentives for the scheme as well. Even in a University like Delhi situated in a sophisticated metropolis, the students joining the N.S.S. have shown commendable zeal in these directions which should make us optimistic that the efforts of the youth, if properly channelized, could tackle this problem much more efficiently.

Functional Literacy and Role of Institutions of Higher Learning

Some reference has already been made to the importance of sustaining the gains of the literacy efforts. In this direction, the more recent thinking lays much greater emphasis on the introduction of vocational and other components of maximum relevance to the learners. The term Functional Literacy, which appears to be emphasised more and more, appear to have come into its own at the World conference of Ministers of Education on the Eradication of Illiteracy held by UNESCO at Tehran in 1965. The Kothari Commission in 1966 in our country had also rightly emphasised this aspect of adult education, which according to the Commission should provide every adult citizen with an opportunity for education of the type which he wishes and which he should have for his personal enrichment, professional advancement and effective participation in social and political life. Functional literacy programmes should be based on much more intensive but diversified curricula tailored to the needs of a particular group and these should be coupled with the conventional curricula involving the 3R's. Efforts should be made to integrate the literacy, vocational and other components so that these do not necessarily follow a set sequence but proceed simultaneously depending upon the motivation, competency and resources of a group. In order to achieve optimum results within the shortest time possible, effective use should be made of all appropriate educational technology like visual aids and mass media.

Another direction in which much more attention is called for could be the production of relevant and useful literature for neo-literates in regional languages. The role of a net work of public or even mobile libraries in these directions cannot be over-emphasized. Publication of village newspapers like 'Kibaru' in Mali and 'Game Su' in West African state of Togo under a UNESCO project are just another illustrative examples of experiments being attempted to sustain the initial benefits of Literacy programmes. Obviously, universities and other institutions of higher learning should be involved in an effective manner for chalking out relevant programmes suited to our own conditions, which also vary so widely from region to region. It is only with the willing and enthusiastic cooperation at all levels that we may hope to remove the scar of illiteracy from the face of our nation, enabling the citizens to play their due role in its social, cultural and economic development.

[Courtesy : Spotlight Programme, AIR]

Youth Activities in University

D. H. Goswami*

The University is a temple of learning where young persons are given instructions to gather knowledge by acquiring facts, figures and formulae. More important is whether one's intelligence enables one to make use of the acquired facts and figures to enrich the fundamental knowledge in various disciplines and for meaningful research. The function of university becomes obsolete if it does not teach students to solve the daily problems of life, through their learning and research and further students should derive a sense of inner satisfaction while they acquire their knowledge by way of formal education. Perhaps, it will not be a sweeping comment if it is said that our universities lose themselves in verbiage; we are prone to emphasise on didactic teaching, abstract thinking and academic type of research which are of very little value in solving our day to day life's problems. The turn-out of Ph.Ds in galore of various universities, on topics of research, bear eloquent testimony to this fact.

Apart from academic leanings, the youth, while in the university, try to organise unions for various extra-curricular and co-curricular activities but in most universities the unions degenerate themselves into a short of weapon to wage constant and frequent 'little-wars' against administration. Ironically a handful of students guide the destiny of such unions; the large majority of students are either apathetic or get themselves occupied with other activities like drama, music, games and sports, debates etc. The 'Union' members have either some political leanings or more often than not they are being utilised by politically motivated people as their tools. Their activities seem entirely devoid of any purpose; they engage themselves in blurred and hazy goals, having very little relevance to the solving of the pressing social and economic need for upliftment of the society. The long-awaited need for thought and action for the poorest amongst the poor to get out of want and misery, hardly concern the 'Union'. On the contrary the 'Unions' wallow themselves in pettifoggery. But of late, there has been a departure from the above position and the U.G.C. along with many universities are trying their best, through change of syllabi and examination system, to make education realistic and meaningful.

The famous Spanish thinker Jose Ortega Gasset observed; 'Man does not exercise his thought because he finds it amusing, but because obliged as he is to live submerged in the world and to force

his way among things, he finds himself under the necessity of organising his psychic activities, which are not very different from those of the anthropoid, in the form of thought—which is what the animal does, not do Man then, rather than by what he is, then by what he has, escape from the Zoological scale, by what he does, by his conduct.... We do not live in order to think..... We think in order to succeed in subsisting or surviving.'

Rural people and rural development have received a tremendous boost in recent years. But then it will be a folly to assume that only the poor need to revive the conditions of men, the rich need it as much as the poor, though their needs may altogether be different. The rich may be or can be trained in a particular way to share his wealth and prosperity with the needy so that society as a whole receives a boon. It is for the youth to organise activities so that people as a whole lift themselves up, because poor or rich, it is not difficult to lose the condition of being man. For example, knowledge concerning some problems of health, education, some topics of home and family interests, hobbies, arts, cultural and public affairs can be effectively assimilated by the receiver. In activities like this, radio and television can play a very effective and significant role. Vacations could be used by a host of employers—restaurant owners, vegetable farmers, garage proprietors, business-concerns to engage the youth in purposeful work, because students on holiday often make up in enthusiasm what they lack in experience. But the important point that the youth may not forget is that an opportunity to serve is much more important than getting paid for the work rendered.

In our country the functional literacy programme has come to stay, but there is a marked shift of emphasis from the traditional 3-R's concept of literacy to the new 3 F's programme of functional literacy, food production and family planning. All over the country the universities through their NSS activities are engaging themselves in such programmes which concern, to a very large extent, on non-formal education. It will also be worth-while if the students also can develop their latent talents in arts, culture, games and sports without in any way interfering with their formal education and this could be done by arranging programme during holidays i.e. summer and winter holidays.

Our youth should understand that Mahatma Gandhi was the greatest martyr of secularism, and also of socialism. They should understand the real spirit of secularism before they start preaching on the subject. Some of our 'radical' youth consider secularism as something similar to atheism—the negation of religion and everything associated with it. Such notion lead the youth up by the garden path; without moral fear and without conscientious awareness of one's responsibilities it is well-nigh

*Registrar, Dibrugarh University.

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Grading System in University Examinations

V. Natarajan*

As a part of research activity of the Association of Indian Universities it was decided to undertake a research study to analyse the results in various undergraduate examinations with a view to design a sound, stable system of Grading in these subject areas.

Objectives

The following would be the main objectives of analysing the results and designing a sound, stable grading system :

1. Determination of range of marks, in subjects like Languages, Literature, Humanities, Psychology, Philosophy, Economics, History, Geography, Commerce, Mathematics, Physics, Chemistry, Zoology, Botany, corresponding to percentages on 9 point scale as per Prof. Barrow, Prof. Dandekar and Dr. Hill (detailed out in paper on "Grading" for the University of Madras, Workshop (Dec. 22-23).
2. Construction of Normative Standards in different subjects from the results of the last 3 years from one particular university.
3. Design of a Grading system for these subjects based on 1 and 2 above, after comparing the 5 point, 7 point and 9 point scales.
4. Publication of a Monograph on Grading for University examinations incorporating the results of the Research Study.
5. Design of grading system to establish National Standards after Coordinating the studies of atleast 10 universities on these lines.

Scope

In order to get the results, a university which will willingly cooperate, will be taken and a questionnaire will be prepared and sent to it. If necessary, discussions will be held with Officers-in-charge of Examinations in the University to finalise format for return of results in different subjects. A questionnaire will be sent inviting information from teachers of these subjects to respond to 5 point, 7 point, 9 point scales and percentages of students who would obtain these grades in different subjects. A standard will be prepared in terms of percentages in these categories and this will be used to prepare Normative standards.

Normative table in a subject will give details of percentages (finalised as above) and ranges of marks

corresponding to these percentages (obtained by analysis) in all the 3 years' of examination in these subjects.

Design of a grading system will be made after comparative study of better distinctions amongst students in respect of 5 point, 7 point and 9 point scales.

A Monograph can be prepared on Grading in University Examinations which can be taken as a guideline for individual university examination unit to undertake such a study.

The Research Cell had taken 10 universities spread over the country and got these projects of Design of Grading System on the lines found in the Monograph, started. Coordination of these and compilation of a comparative study of these Grading System helped the Research Cell to propose National Standards.

Procedure

1. The selected university will be requested to send the marks obtained by 10% random sample of their students in different subjects for the last 3 years.
2. A questionnaire will be sent soliciting the views of teachers of different subjects (atleast 10 to 12 per subject area) on 5 point, 7 point and 9 point scales; percentages of students in these grade categories incorporating both fixed response and free response items.
3. Ranges of marks in different subject areas for the last 3 years for percentages of students on these categories will be worked out for the results by the Research Cell.
4. Normative standards for different subjects will be prepared and a choice made amongst 5 point 7 point and 9 point scales, if possible.
5. A grading system that is stable, since the performance of peers over the years has been considered, will be designed.
6. A Monograph will be published incorporating the results of this study at this stage.

The Monograph will invite other universities (specially the selected universities) to undertake such a study on the lines described to formulate a Grading System. Such studies will be coordinated, initiated and compiled by the Research Cell. It is suggested that a minimum of 10 universities must atleast participate in this.

7. It is possible now to propose National Standards on Grading scientifically.

Planning

- (1) Stage I : Obtaining from an university results of the last 3 years of students in their first degree subjects/postgraduate subjects.
- (2) Stage II : Preparing a questionnaire to solicit views of teachers on 5,7,9 point scales; percentages of students in these grade categories.
- (3) Stage III : Analysing responses; finalising the three different grade systems; analysing

*Project Officer (Exams), AIU, New Delhi

for means, standard deviations, derived scores, etc.

- (4) Stage IV : Comparative study of all possible grading systems reporting.
- (5) Stage V : Getting atleast 10 other universities to do this (Stages I to IV), coordinating.
- (6) Stage VI : Finalising results, reporting, supplement to Monograph.

Description of tasks in different stages

Stage I

1. Choosing an university, 10 first degree subjects and 5 postgraduate subjects.
2. Preparing the format in which to obtain results in these, for the last 3 years.
3. Obtaining the results of students adopting 10%—20% random sampling if the population is large, in person.
4. Typing out these.

Stage II

1. Analysing the results of stage I for means, standard deviations and adopting suitable percentages for 5 pt, 7pt, 9pt scales for their different individual grade categories.
2. Preparing a brief note of 5pt/7pt/9pt scale grade category percentages in these subjects.
3. Preparing a questionnaire to solicit views from subject teachers on 5/7/9 point scales; on percentages of students in these categories.
4. Despatching questionnaire in (3) with note in (2) to teachers of the university.

Stage III

1. Consolidating the replies.
2. Adopting a suitable percentages for categories in all 3 grade systems.
3. Consolidating Stage II (1) results.
4. Analysing the proposed grade systems against (3) above.

Stage IV

1. Consolidating the 3 different grading systems.
2. Comparing them in terms of ranges of marks, number of students in each grade category, the discrimination level.
3. Choosing one of the three on the basis of (2).
4. Reporting the point scale recommended and normative tables for each subject.

Stage V

1. Preparing a draft report of work from Stage I to IV.
2. Selecting 10 universities and sending draft report to all of them with a request to undertake a similar study.
3. Coordinating at different stages through correspondence.
4. Collecting individual draft reports of these universities.

Stage VI

1. Comparative study of individual draft reports of universities.
2. Preparing a consolidated final report.
3. Writing up a supplement to Monograph.

Data Collection

A thorough literature survey was done and various systems in operation in our country (grading system in I.I.T's, agricultural universities) and in other educationally developed countries (USA, UK) were studied and a system was worked out and outlined (in a paper at the Madras University Grading Workshop Dec. 22-23). Results of examination marks of students in the last 3 years from two universities (Delhi & Madras) were obtained and analysed as outlined. In addition a questionnaire was prepared and administered on nearly 800 teachers (in Madras, Madurai and Delhi) and the data collected in terms of their responses. The analysis of the data through a computer yielded results that were incorporated in Monograph on Grading (second and third editions). Personal interviews with teachers were held and workshops on Grading were conducted in many universities and made use of to arrive at conclusions.

Analysis

The responses to various universities in the questionnaire were analysed and consensus worked out. Certain findings were reported in the Monograph in 2nd and 3rd editions.

The analysis of marks of students in 10 undergraduate subjects (Mathematics, Chemistry, Physics, Botany, Zoology, Psychology, History, Geography, Economics and Commerce) and 5 post-graduate subjects led to certain findings reported in the Monograph.

Findings

1. A comparative study of the three systems 5 point scale, 7 point scale and 9 point scale when applied to actual examination marks of these two universities yielded that 5 point scale is better than 7 point scale and certainly much better than 9 point scale. However, 7 point scale has been adopted by many universities in the country (at the instance of UGC) and this is a good starting point. Based on this major finding that 3 point scale is superior to 7 point scale universities will increasingly find it necessary to switch over to 5 point scale. This is corroborated by Dr. Harper's theoretical analysis of different point scales and the experiences of very many universities (like Princeton, Michigan) and in our own country in I.I.Ts.

2. The Normative Standard Table method proposed by AIU, Research Cell is highly suitable for large scale Examinations. Under these conditions the UGC method (outlined in their booklet) is found to over grade. This is a major finding and many universities have adopted our Normative Method with slight modifications (Delhi, Madras, Madurai, ISM Dhanbad, Mysore, Andhra, Rajasthan). Appendix C Monograph on Grading.

3. Direct Grading using 7 point scale is favoured for internal assessment.

4. Conversion of marks to grades (a transitional procedure) is to be based on Normative Table Method (ATU) for large scale examinations.

5. A system of grading restructured examinations with objective and subjective questions has been evolved (Appendix F—Monograph on Grading).

6. A facing sheet for an answerbook for adopting Grading System has been evolved and many universities have adopted it.

7. Randomization of answer scripts is an important step and prerequisite for adoption of Grading System.

Appendix L gives the summary of recommendations made to various universities/other bodies in respect of Grading incorporating the findings of this illuminative Research study.

It is necessary that this is to be repeated once in every year. A Monograph^h (in its third edition) incorporating the findings has become very popular and useful to universities. ☐

Youth Activities in University

(Continued from Page 294)

impossible to build up character and the right outlook so very important for the developing youth. Another glaring example of the loss of fundamental human values among young people who feel that respecting moral values is just the fancy of elderly people who are terribly out dated and may be also unwanted in a world of resurgent youth. A successful life, and a happy life, is possible only when one is able to adjust and adopt the different sides of the personality in a harmonious way and the entire personality with others that form the constituents of the world. After all it is youth who should prepare themselves to provide intellectual leadership to the country and also technical perfection through sheer hard endeavour. In order to do away with despondency and dissatisfaction, the youth should continuously and Consciously be aware of the fact that the future well-being of the country really lies in proper education, the accent and emphasis be placed on quality rather than on quantity.

People often say that man is a selfish creature, that his basic instincts concern only his personal welfare. But truly speaking man has a dual nature—he is at once selfish and selfless. He is concerned with his personal welfare to survive, yet he has the instinct to preserve the welfare of his group and if necessary he will die for it. The youth, especially, should feel joy in giving freely of his services and money, when possible, and if he does so he satisfies an instinctive desire. Giving of oneself for the betterment of the less fortunate is the cheapest and most effective mental therapy. Yet, in the midst of complexities and vicissitudes of life, the youth may rightly absorb themselves on their academic attainments, they may rightly think of their future career, they may rightly think of their obligations to themselves, but sadly enough they also wrongly tend to overlook the fact that the act of giving is also an act

of self-fulfilment. The joy of giving is a delightful experience and let the youths remember that when they help others up a steep hill, they got nearer to the top themselves. ☐

MANAGEMENT OF EXAMINATIONS

by

AMRIK SINGH

and

H. S. SINGHA

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No Peace without Prosperity

Mr. Hans-Dietrich Genscher, Minister for Foreign Affairs of the Federal Republic of Germany received the degree of Doctor of Science (Honoris Causa) at a special convocation of the Indian Institute of Technology, Madras. The Minister in his inspiring address said that peace and prosperity were inseparable. He said that if international community failed to realise this and act accordingly there was no hope for the world. It is important that all States, large and small, poor or affluent, should meet each other with respect and as equal partners, without at any stage trying to dominate others or to establish zones of influence or prescribe paths for others. Only if all the countries understand this lesson, they will be able to serve peace.

The industrialised countries which had opened their markets

and it would be possible to step it up substantially once the consequences of recession were over.

Stressing the importance of private capital he said that this brought with it technical know-how and modern management techniques. He suggested that greater long term security for the entering capital be provided by the developing country concerned. This was the quickest and the surest way to get both private capital and the associated technology. There were good prospects of several industrialised countries providing unrestricted transfer of technology to the developing countries in the years to come. He also emphasised the responsibility of the developing countries themselves for achieving accelerated development of their economies. All help from outside would lead to nothing if there was

politician and statesman of outstanding eminence, and as a dedicated parliamentarian for his expert knowledge in the areas of home and foreign affairs, he made a significant contribution to the realisation of peace and collaboration among nations. He is true representative of the people and the government whose contribution to the Indian Institute of Technology, Madras, is hailed as the largest educational project sponsored by the Federal Republic of Germany outside its national frontiers.

Mr. G. Narayanamurthi, Acting Director of the Institute, presented the scroll to the Minister.

Illiteracy—common problem of developing countries

Mr. A. M. M' Bow, Director-General of Unesco, on his visit to India, held discussions, with the Union Minister for Education and Social Welfare, Dr. P. C. Chunder. Analysing the problems of illiteracy and slow progress of universalisation of education in the developing countries, Mr. M' Bow observed that such problems had arisen because of the adoption of the western system of formal education by developing countries. Political will is a necessary pre-requisite to overcome the problems of illiteracy. He said that any successful education system should be relevant to the situation in the country concerned, promote cultural identity and fulfil governmental objectives. The Director-General underlined the need of a link between work experience and education. By bridging the gap between the two, the load on society can be considerably reduced. Similarly higher education should also be linked with research and productive work. He said India could draw upon the experience acquired by the Unesco experts in the field of training workers in other countries.

Convocation

to the products of the developing countries should open them still wider. The Federal Republic of Germany has considerably increased its imports of not only primary commodities but also manufactures from the developing countries. The imports during 1975 increased by 25%. In the following year they went up to 17% in real terms. The imports from India increased not less than 55%. West Germany had played its role remarkably well in helping to bring about world economic recovery and render substantial contribution to the growth process of the developing countries.

The Minister noted the substantial capital flow from his country to the developing countries including India, both Government and private capital. He said that the industrialised countries should provide for greater capital outflow

no political will in the developing country to mobilise the resources that had laid fallow and pursued suitable policies for significant increases in production and productivity. The outlook was good with all the countries of the world increasingly becoming aware of their inter-dependence and trying to be complementary in their economic activities. The Federal Republic of Germany for its part was pledged to achieving a new and more just international economic order in which the industrialised countries would have stable growth and the developing countries would be in a position to achieve accelerated development of their economies and banish hunger and privation from their midst.

Prof. P. Venkat Rao read the citation. He said that Mr. Genscher had won worldwide renown as a

Inservice programme for new faculty members

The idea of a training programme for university teachers is rather new. A lecturer in a university is required to take up his full load of teaching from the first day of his appointment. He starts teaching without any orientation to methods of teaching. He designs his lectures without being given a deeper insight into the purposeful organisation of his lectures. He lacks the proper understanding of the adolescents to whom he teaches. He prepares question papers and assess the answerbooks without receiving a scientific knowledge of evaluation techniques. He has no grounding to organize tutorials, seminars or workshops. There is no tradition in our universities where a junior consults his seniors on professional matters. Nor is there a tradition under which a departmental head imparts regularly phased guidance to the new entrants in the profession. The enthusiastic recruit is left to himself and all the competencies in course of time are gained by him through trial and error.

The Education Commission (1964-66) emphasized in concrete terms the need for a training course for fresh and newly recruited university and college teachers. It was pointed out that for such lecturers some suitable form of training or orientation course is essential to give them a reasonable understanding of educational objectives and purposes. This would help them in overcoming initial teaching trouble and would create a sense of confidence. The Education Commission has rightly pointed out that teaching is a skilled profession like other highly skilled professions and training should be an essential qualification for the new entrants.

After the report of the Commission a few institutions have started taking steps to launch orientation programmes for the teachers of higher education. The University Grants Commission

initiated a scheme in 1970 to organise summer institutes for the orientation of juniors and fresh lecturers in methods of teaching. The Maharashtra Government initiated such a scheme for lecturers of junior colleges. It presupposes that the new entrants to the teaching profession are not fully equipped to deliver the subject matter according to the needs, aspirations and age of the students. The campuses of Bombay and Poona Universities run regular courses on teaching methods for college lecturers. The Calicut University has a similar programme. It has initiated a pre-service course of Master of College Teaching (MCT) which prepares lecturers for colleges and universities. The Department of Education of the University of Madras, on the other hand, has initiated an inservice course on university teaching methods for the lecturers. Similar courses are being contemplated by the Osmania and Mysore Universities.

The Department of the Faculty of Education and Psychology of the M.S. University of Baroda, which is engaged in the education of teachers for BED, MED and PhD levels has thought it worthwhile to undertake an additional responsibility of organizing inservice course in methodology of teaching for fresh and newly recruited lecturers of the university. The department has set up a unit on higher education with the help of University Grants Commission in 1975 and the task to organise the methodology course has since been entrusted to this unit. This part-time course with a total of 72 working hours lays emphasis on : (i) making teaching effective ; (ii) improving lectures ; (iii) setting better examination papers ; (iv) conducting seminars and tutorials ; (v) motivating youth for higher education ; and (vi) sharing the experiences of each other. The unit

has taken up the responsibility to organise the inservice course on methodology which will be termed as 'seminars on higher education'. The work of the unit can be conveniently considered under two phases. In the first phase the unit concentrates to create a climate for this innovative course and in the second phase to implement the scheme as adopted by the Syndicate of the university.

Phase I

In an attempt to create a favourable atmosphere for the new course on higher education three seminars were organised by the University during 1975-76. These were on (i) Teaching Methods in Higher Education ; (2) University Governance ; and (3) Examination Reforms in University. The seminars were well attended and were organised with a view to creating a forum where university teachers met to understand the problems of higher education, finding their solutions and disseminating the innovations that are taking place in the university and elsewhere. A seminar on methods of teaching and evaluation in higher education was organised during April 1976 with the financial assistance from the University Grants Commission. The unique feature of the seminar was that it consisted of university and college teachers of different disciplines, viz., Physics, Chemistry, Mathematics, Psychology, Home Science, Social Work, Education, Political Science, Agriculture and the like. Twenty-eight university professors, readers and lecturers from eight States, namely, Gujarat, Punjab, Rajasthan, Madhya Pradesh, Andhra Pradesh, Tamil Nadu, Maharashtra and Delhi participated. Twenty-four teachers of Baroda University were the other participants. During the course of four days detailed discussions on teaching methods for universities, examination reforms and the role of university departments of education in the improvement of teaching and evaluation in higher education, were held.

Phase II

The actual programme of inservice training on methodology of teaching and evaluation at university level for the lecturers of Baroda University started in the month of July 1976. Forty-nine teachers agreed to participate in the course. The break-up of the participants department-wise is as follows : Home Science 5; Botany 2; Museology 1; Technology 4; Polytechnic 3; Philosophy 2; Psychology 1; Music 9; Education 7; Art and Painting 2; Physics 3; Chemistry 2; Statistics 1; Microbiology 2; Padra College 2; Pharmacy 1; Archaeology 1; Economics 1. Besides the newly appointed lecturers, some of the research fellows also joined the seminars. The group therefore worked as a forum of the experienced and fresh teachers of the University. Considering the diverse nature of the group the syllabus was drawn on inter-disciplinary approach. Topics of common interests from the areas of teaching, evaluation and general problems of higher education were incorporated in the draft syllabus as listed below :

Course Outline :

(A) General Topics : (1) Objectives of Higher Education; (2) University Governance; (3) Unrest among students; (4) Achievement and motivation; (5) Psychology of teaching; (6) Vitalizing classroom through audio visual aids; (7) Creativity in teaching : (B) Teaching Methods: (8) Lecture method; (9) Discussion method; (10) Tutorial system; (11) Multi media approach; (12) Programmed learning ; (13) Teaching through project method ; (C) Evaluation : (14) Assessment in the discipline of creative arts; (15) Internal assessment : (16) Grade system; (17) Question bank; (18) Continuous assessment. Besides the theoretical lecture-cum-discussions there were sessions for practical work. Three sessions were spent on micro-lectures. The participants delivered a lecture for ten minutes on their subject before the group. The lecture was taped and replayed

for the auto-correction of the lecturer. The other participants also gave feed back for the improvement of teaching the topic. They were supplied enough reading material and were given home assignments to be completed. The whole approach organizing this course was to involve the participants actively in the academic discussion. The main emphasis was placed on the sharing of experiences. The speakers on different topics initiated discussion for an hour and for another hour discussion by the participants was encouraged and some of the sessions were lively as the topics were thoroughly discussed. The speakers tried to evolve a consensus on the subject.

Team work in scientific research

Dr. R. Ramanna, Director, Bhabha Atomic Research Centre, Bombay, addressed the foundation day lecture of Regional Laboratory, Jorhat. In his address Dr Ramanna said that scientific advancements greatly depended on team work and team spirit of the scientists and research workers. He traced the origin and historical background of science in the world, particularly with reference to India. The development of science was the mile-stone of advancement of human society although certain factors of religious superstition hindered on its way and to its proper perspective on basic values. He made a strong plea that the research activities in any front should not centre round for achievement of political end. In such cases it loses its very objective. He also drew attention to various drawbacks, in the matter of research works in India.

Dr. Ramanna stressed the need of creation of scientific atmosphere and was confident that research atmosphere would lead to achieve the desired objectives in offering material facilities and other scientific assistance for the benefit of common people in the society. He said that the regional research laboratory of Jorhat within the

last two years improved its capabilities in development of technology in eastern zone of the country which had abundant raw material and natural resources if properly and adequately tapped may be of great benefit to the people of the region. Prof. H.K. Baruah, Vice-Chancellor of Gauhati University, presided at the function. He also stressed the need for the proper development of science and technology and its urgent need for suitable application to the basic requirements of society.

Personal

1. Shri V. R. Mehta, Vice-Chancellor, Gujarat Agricultural University, has been elected the President of the Indian Agricultural Universities Association for the coming year.

2. Dr. A. S. Cheema, Vice-Chancellor, Punjab Agricultural University, has been appointed a member of the University Grants Commission for a term of three years.

3. Dr. K. G. Gollakota has taken over as Acting Vice-Chancellor of G. B. Pant University of Agriculture and Technology, Pantnagar.

4. Mr. B.P.R. Vithal, Secretary to Andhra Government, Finance and Planning Department, has been appointed as Vice-Chancellor Incharge during the period of absence of Shri P. Jagannathan Reddy, Vice-Chancellor of Osmania University, w.e.f. May 9, 1977.

5. Dr. D. T. Lakdawala, Director, Department of Economics, University of Bombay, has been appointed Deputy Chairman of Planning Commission.

6. Shri A. S. Bajwa has been appointed Registrar of Himachal Pradesh University.

4. Mr. V. B. Bansal has been appointed Registrar of Bundelkhand University.

Madras Institutes' course in Andragogy

The Madras University will organise a Master's programme in Andragogy (adult education) from July 1977. The course which will be the first of its kind is designed to meet the increasing demand of people trained in the principles and practices of adult education. It will give an opportunity to students to understand the adult education activities based on the concepts and methods of social sciences and to gain a knowledge of practical strategies and skills which are essential for adult education programmes.

The programme would stress the applied nature of knowledge as related to adult education practice and help the student make the transfer of concepts and methods to adult education programmes. The course work

two in the first year and two in the second year. The students will be required to submit the thesis at the end of the first semester which will be evaluated by two examiners nominated by the university, one of them will be the supervisor. Each participant shall be required to select a topic for the thesis and the participant has to do it at the end of the second semester. The field work, as part of the MA course for bringing out a thesis, for a selective problem by the student, should start at the end of the second semester and individual assignment may be given to each student as segment of the field work to make an assessment of the local culture to which they have been exposed and submit the assignments for evaluation. The Department of Andragogy has built a high credibility and shall be linked with various regional, national

convened to consider matters of common interest with a view to evolving uniform approach to their problems. The Director of the Indian Institute of Technology, Madras, Vice-Chancellor of Gandhigram Rural Institute, a 'deemed university' would now onwards be regularly invited. The meeting decided to meet once in six months to discuss common campus problems. The next meeting would be held on 28th August at Coimbatore.

Amongst the various questions that were discussed, the implementation of University Grants Commission scales of pay for university teachers with retrospective effect from April 1974 figured prominently. This was necessary in view of the assurances given to the teachers by their universities. Prof. Chittibabu explained his proposal to set up local study centres within the university area as well as outside Madurai under the open university system. The principals of the Madurai University had agreed to place at the disposal of the Institute of Correspondence Course and Continuing Education all facilities available viz. libraries, laboratories and lecture rooms as well as the services of the teachers on part-time basis. The university has decided to compensate those colleges for the facilities provided to the Institute of Correspondence Course. He suggested that other universities in the State should also extend their cooperation and help in this regard. In view of the popularity of the tourism, it was suggested that the universities may introduce one-year diploma course from the next academic year. The Vice-Chancellor of the University of Madras explained the difficulties regarding conferring of the autonomous status on certain identified colleges. This had to be preceded by the adoption of certain amendments to the University Acts and he was keenly awaiting clearance from the Central Ministry for the incorporation of necessary amendments to the Madras University Act.

CAMPUS NEWS

is designed to be inter-disciplinary so that students will be oriented towards the concepts and methods of different disciplines. The unique inter-disciplinary nature of the programme will provide the students the opportunity to acquire confidence in those subject areas considered central to adult education such as psychology, sociology, anthropology, mathematics etc. Along with these students are offered two optional courses viz., management of adult education programme and instructional product development.

The postgraduate course will be open to the Bachelor degree of Madras University or an equivalent examination. Aptitude and motivation for adult education work has been prescribed as pre-requisite for admission. The course of study for the degree of Master of Arts in Andragogy shall consist of four semesters,

and international non-formal education centres. The metropolitan city and its neighbouring suburban and rural settlements provide various non-formal educational programmes. The students will be exposed to a variety of on-going programmes through field visit, teaching programmes and project work. Much emphasis is given to the practical work for which these centres will serve as field stations. Also nationally and internationally reputed adult educators will lend their expertise periodically in the form of special lectures, seminars.

VCs of Tamil Nadu meet in Madurai

The universities in Tamil Nadu held their first joint meeting in Madurai under the chairmanship of Prof. S. V. Chittibabu, Vice-Chancellor of Madurai University. The meeting was

The Vice-Chancellor suggested that in the event of the Pre-University course being shifted to the new pattern of education, a large number of college teachers are likely to be out of jobs and suggested that the Government should absorb such teachers in other departments. He also suggested that the Government should compensate the university the loss on account of examination fees under the new education pattern. It was also decided to give effect to the grading system in the university examinations from 1980-81 academic year.

ISAE convention held at Pune

The fifteenth annual convention of the Indian Society of Agricultural Engineers (ISAE) was held at the Agricultural College, Poona under the joint auspices of Mahatma Phule Krishi Vidyapeeth, Punjabrao Krishi Vishwavidyalaya, Marathawada Agricultural University and Konkarn Krishi Vishwavidyalaya. The chief guest of the occasion was Dr. V. M. Dandekar, Director of Gokhale Institute of Economics and Politics. The main theme of the convention was 'Agricultural engineering technology for small and marginal farmers'.

Dr. Dandekar appealed to the agricultural engineers that they should develop light implements which can be used with human power as most of the small and marginal farmers do not possess bullocks. In the context of small and marginal farmers the organisation would require complete reorganisation of agriculture which unfortunately had not been done during the last twenty five years. The offer of civil engineers in the construction of dams and canals was laudable but the 80% of the stored water is being used for only sugarcane production. No technical data in the utilization of water had been maintained. He therefore urged the agricultural engineers to educate the people about the need for soil and water conservation.

Prof. A. C. Pandya, President of the ISAE, in his inaugural address emphasised that the cause of poverty among the small and marginal farmers has the low resource and their inability to take advantage of the modern agricultural technology and develop subsidiary occupations to enhance their income. He said that agricultural engineers could also help small farmers by suggesting more efficient methods for water harvesting, irrigation and soil conservation for using electricity for agriculture production and processing. Shri D. A. Gadkary, Founder President of the ISAE was presented with a gold medal for his meritorious work in the field of agricultural engineering.

The convention was attended by over three hundred agricultural engineers from all over the country. Dr. A. B. Joshi Vice-Chancellor of the MPKV extended a warm welcome on behalf of the agricultural universities of the State.

Continuing education department for Patna University

There is a proposal to open a department of continuing education in collaboration with the University of Manchester at Patna. Dr. A. K. Dhan, Vice-Chancellor, informed that the preliminary discussions in this connection have been held with Prof. W.J.A. Harris of the Department of Adult and Higher Education, University of Manchester, when he visited India during March this year. The British Council has also offered assistance for the project. The Faculty of Continuing Education will provide opportunity for learning to a large number of persons who are left on their own once they leave the portals of the university. The role of such a department includes learning about the education of adults by approaching the community through both consultation and teaching, teaching adults in a limited number of areas where for the time being no other education-

nal or administrative justification is being involved and give leadership and advice in the education of adults for the many organisations and institutions already working for the continuing and non-formal education for adults. The Vice-Chancellor said that the department is fully organised. It is proposed to start few experimental seminars-conferences for professionals in training and updating (for experienced professionals) in the areas of engineering, medicine, architecture and social sciences. The various research institutes existing in Patna would be involved from the beginning in these aspects of continuing education for the highly educated people but the emphasis might be on the exchange of investigation and research findings which may have direct relevance to urgent community problems.

National workshop on micro-teaching

The University of Indore in collaboration with the National Council of Educational Research and Training, New Delhi, organised a workshop on micro-teaching. The Department of Teaching Education of the NCERT also provided the resource persons. The main purpose of the workshop was to integrate the research findings in the field experience in the area of micro-teaching.

There were about 25 participants coming from the States of Tamil Nadu, Andhra, Karnataka, Maharashtra, Gujarat, Orissa, Madhya Pradesh, Rajasthan, Harayana, Himachal Pradesh, Uttar Pradesh, Punjab, West Bengal and the Union Territories of Chandigarh and Delhi. Representatives also came from colleges of education and departments of education of different universities, national bodies like the NCERT, CASE and the GCPI.

The participants showed their keenness for improving student teaching by introducing micro-teaching as a regular part of the teacher education programme. The meet was highly successful in

the improvement of student teaching and other programmes of teacher education.

Dr. Dhan heads UGC panel

Dr. A. K. Dhan, Vice-Chancellor, Patna University, has been appointed Chairman of the committee constituted by the University Grants Commission to advise on the concept and modalities of implementation of remedial courses to be provided in universities and colleges. The objective of the committee is to study in depth the question of organising courses for students who due to certain reasons were unable to complete the required course contents for various examinations. This will go a long way in meeting the problem of growing numbers of drop-outs at different stages of education. This programme is of special significance for the weaker sections of the population who are unable to appear at examinations due to non-completion of courses or on account of poor financial conditions.

CSIR complex to be surveyed

The University of Madras will appoint a commission to visit the CSIR complex for recognition of all the seven extension centres located in the complex for Ph D work. Dr. Malcolm S. Adiseshiah said that scientists should evolve an integrated form of rural development. He commended the efforts of the CSIR in adopting Karimnagar district in Andhra Pradesh and bringing science and technology to the community at large to improve the conditions of rural life. He congratulated Dr. Y. Nayudamma, Director-General of CSIR and his colleagues on the efforts in this direction of taking up the problems of rural development in the present set up and appealed to the scientists to take up the present duties. He appreciated the activities of the CSIR and in particular the Central Electrochemical Research Institute to the cause of industrial development.

Recent changes in GAU

The Gujarat Agricultural University has decided to organise department of forestry and fishery in the university from the coming academic session. The university has also approved a scheme for the award of GAU fellowship for postgraduate studies in the various faculties of the university. A five-day workshop on teaching methods and evaluation at the Anand campus of the university was organised for evolving guidelines on teaching and evaluation methods for the benefit of young and new teachers of the university. The code of conduct proposed by the university teachers and adopted by the Academic Council was approved by the Board of Management and has been implemented.

Various new courses in Panjab

The Academic Council of Panjab University which met in Chandigarh recently approved the scheme to introduce MA course in Education from the next year as a purely academic discipline. Both science and arts graduates with at least a second class degree would be eligible for admission to this general course. Preference will be given to those having Education as an elective subject at the graduate level. It was also decided in principle to start a Master's course in Indian theatre. So far the university has been running only one-year diploma course in the subject.

MA and MPhil courses in Music will be started on the campus with Hindi, Punjabi and English as the medium. MPhil course in Sociology will also be introduced in the ensuing session. Besides, a two-year full time postgraduate course in personnel management and industrial relations will be introduced in the Department of Commerce and Business Management. This new vocational course will aim at meeting the increasing need of the industrial society for managerial talents and at making education more and more job-oriented.

Garhwal develops centre of Himalayan studies

The Institute of Himalayan Studies and Regional Development of Garhwal University has framed details of MPhil course in regional development and post-graduate diploma courses in Environmentalology and Tourism. The centre will also provide consultancy in Tourism and Tourism Geography. Dr. Tej Vir Singh of Lucknow University is likely to join the institute as its full-time Director. He has made notable contributions in the field of tourism and had set up a non-profit tourism research centre in Lucknow. He also edits a journal of Tourism and Research besides extending consultancy in tourism to various universities and tourism directorates of State Governments.

Efforts to make PU central university

A delegation of Patna University Teacher's Association met the Union Education Minister, Dr. P. C. Chunder, in Delhi and submitted a memorandum demanding conversion of Patna University into a central university and improvements in the conditions of the university. Prof. P. N. Sharma, President of the Association, after the meeting said that the Central Government would consider the demands sympathetically. Dr. A. K. Dhan, Vice-Chancellor of the University, has also met the Education Minister and requested him to convert Patna University into a central university. Meanwhile the University Student's Union has decided to name the union building as 'Jayaprakash Bhavan' in honour of Shri Jayaprakash Narayan, an ex-student of the university. There is also a proposal to rename the university after him.

New Sports complex at NSCI

A mini sports complex has been recently provided by the

National Sports Club of India for the benefit of its members. The complex will provide added facilities for swimming, table tennis, badminton, billiards and squash. A health club is also proposed to be started on this complex. The key part of the complex will be swimming pool which is divided into a shallow end to give training to learners and the end for organising competitions. There is also a puddle pool for tiny tots. While the use of the pools and other courts will be primarily for the members of the NSCI, outsiders like school children and university and college students will also be admitted. The total cost of construction is likely to cross Rs. twenty lakhs.

NFE project at Surat

The Department of Education, South Gujarat University, Surat, is preparing an international directory of literature on non-formal education. The directory would be useful to workers in the field of social and economic development, planning and non-formal education. As a first step literature is sought to be compiled at one place in order to list all references at one place. Dr. Motilal Sharma, Reader in Education would be glad to get the necessary information from workers in this area.

University courses in Stage and Acting

The Calicut University has decided to institute courses in Stage and Acting. Mr. G. Shankara Pillai, the well known experimental dramatist, will be the head of the faculty. These efforts will help in the proper development of Malayalam stage on modern lines.

Southeast Asian regional conference in Physics held at Penang

The University of Science of Malaysia organised southeast asian regional conference on university Physics Education from 16th to 21st May 1977 at Penang. Prof. B. Ramachandra Rao, Vice-Chairman, University Grants

Commission led a delegation consisting of Prof. S. N. Sen (North Bengal University), Prof. L. S. Kothari (Delhi University), Prof. C. Mande (Nagpur University), Prof. B. Sanjeevaiah (Mysore University) and Prof. M. P. Gupta (Ranchi University). The conference brought together the Asian scientists and went a long way in breaking the isolation and frustration that faced them. The conference aimed at identifying, analysing and comparing Physics curricula and approaches to Physics Education in universities in Southeast Asia; discussed the ideas and recommendations of the 1975 International Conference on Physics Education held at Edinburgh; prepared guidelines for the development and improvement of Physics Education necessary for the further growth of regional institutions and organisations. The focus of discussion at the conference was on current Physics courses and curricula in Southeast Asian universities, design development and evaluation of new Physics courses and curricula; new approaches to teaching and learning of Physics; role of teaching laboratory in Physics education; postgraduate education of physicists and physics and Society in Southeast Asia. Prof. Chatar Singh of School of Physics, University of Science of Malaysia was the chief coordinator of the meet.

Modernisation of Sanskrit studies

Dr. R. S. Krishnan, Vice-Chancellor of Kerala University while inaugurating the Tamil Nadu Sanskrit conference in Tiruchi suggested the opening of a higher institute for Sanskrit in each State with facilities for teaching the language both in the modern and the traditional way. Such an institute should provide research facilities for scholars to obtain degrees like M.Litt. and Ph.D. in Sanskrit.

Referring to the popularisation of Sanskrit, Prof. Krishnan said that universities and institutions could provide correspondence courses in Sanskrit to cater to the needs of large number of

employed people who were keen on learning of the language. He did favour the idea to make the study of Sanskrit compulsory in schools and colleges as the academic compulsion on this score might not provide the desirable result. On the contrary it may prove harmful to the cause of Sanskrit.

Mr. T. V. Viswanatha Aiyar, convener of the conference, put forward a fourteen point plan for the consideration of the conference. The plan was intended to popularise and preserve Sanskrit and enrich Indian culture and heritage embedded in the language. He made an appeal to the Central Government to constitute a committee for each State to oversee the objects and purposes for which the Government's Sanskrit grants were made. He also suggested the institution of postal and radio courses for popularising a uniform style of teaching Sanskrit. He appreciated the services of the All-India Radio to revive interest in that language. He proposed the setting up of an agency to prepare original books in Sanskrit in the modern language and emphasised the need for bringing out a newsletter in Sanskrit weekly or daily. Expressing its deep concern over the waste and diversion of funds of Hindus trusts and surplus revenues of temples earmarked for the study of Vedas and Sastras, the conference pleaded with the Government that on no account should such diversions be permitted and the funds used for purposes other than Sanskrit learning and Sanskrit studies be made a first charge on the funds. The universities interested in the promotion of Sanskrit could organise a correspondence course. The conference also suggested a one-year course of extension lectures on subjects of current interests for the benefit of pandits trained on traditional lines. The conference also pleaded for greater importance to Sanskrit in the all-India competitive examinations and the constitution of a semi-official committee at the Central as well as in the States.

Secretary General for ICSW

The International Council of Social Welfare is voluntary organisation promoting social welfare programmes internationally and in specific regions through such functions as the organisation of a world-wide biennial conference of social welfare issues, the organisation of regional seminars, meetings and symposia, the development of policy statements relating to the social welfare field, publication of a journal and other social welfare literature of international interest. The Council operates national committees in over seventy countries and more than twenty international member organisations. Its Governing Body is composed of representatives of each national committee and representatives of the international member organisations. The Secretary-General is the chief executive officer of the Council, appoints all administrative and professional personnel, supervises the administrative operation of the headquarters and regional offices, recommends policies to the Executive Committee supervises the organisation and operation of the world-wide conference and forums held by the Council every two years, prepares and recommends a financial budget to the Council's Finance Committee, assists in raising funds for the operation of the Council and for special projects, prepares position papers for consideration of the Executive Committee and the Committee of Representatives on the important issues involving basic policies and relations with the United Nations and other international agencies and performs such other tasks as may be assigned and as are customary duties for a chief executive of an international organisation such as the ICSW.

The Council has its headquarters in New York. The office of the Secretary-General would fall vacant in 1978. Those who are interested may send

their particulars by 15th June, 1977 to Mr. Reuben C.B. Baetz, Chairman, International Search Committee, 55 Parkdale Avenue, Ottawa, Ontario, Canada K1Y 1E5.

JNU likely to have separate basic sciences departments

A separate school of physical sciences is to be developed in the Jawaharlal Nehru University, New Delhi. The proposal to provide a separate base for physicists and chemists has been discussed at various levels for quite some time. In the changing pattern greater emphasis is being laid on the development of basic sciences. The Indian Institutes of Technology have separate basic science departments which interact on common problems with other departments. It is now felt that the strong basic science departments in the university would be in a better position to feed inter-disciplinary studies. This would however require some adjustments. The school of theoretical and environmental sciences which started functioning last year has already undergone a change and is now known as school of environmental sciences. It will continue to include disciplines like geology and oceanography even after the establishment of the new departments. There is a proposal to have a separate school for the physical sciences. The report of the University Grants Commission is keenly awaited when the further course of action would be finally decided.

Plea for Secondary Education Grants Commission

All-India Secondary Teachers Federation has urged the Union Education Ministry to initiate steps for the setting up of a Secondary Grants Commission on the lines of the University Grants Commission. A delegation of the organisation met the Education Minister and presented

a memorandum of their demands. The memorandum called for a uniform national pay structure for teachers and non-teaching staff of secondary schools throughout the country.

PU new condition for affiliation

In future only those colleges who pay new UGC scale to their teachers will be allowed affiliation with Panjab University. The managements will be required to fulfil this condition in addition to those already laid down for grant of affiliation to the university.

The university also decided to institute Justice Mehar Chand Mahajan Memorial Lectures in the Department of Law. Justice Mahajan had been the Dean of the Faculty of Law for a number of years and had been its senator and syndic for a long period.

New courses at South Campus

The South Delhi campus of the University of Delhi would soon start postgraduate courses in Commerce, Political Science, Sanskrit, Mathematics, History, Philosophy, Physics, Economics. The university has been asked to send revised proposals to the University Grants Commission for the construction of buildings, purchase of books, equipment as a sum of Rs. one crore might be available for the development of the campus during the current plan period.

Swaminathan elected to US Academy

Dr. M. S. Swaminathan, Director-General of Indian Council of Agricultural Research, has been elected Foreign Associate of National Academy of Sciences of the USA. He is the third Indian scientist and the first agricultural scientist to be so honoured. The other two are Dr. V. Ramalingaswami, Director of the All-India Institute of Medical Sciences, New Delhi and Dr. D. Lal, Director of the Physical Research Laboratory, Ahmedabad.

GURU NANAK DEV UNIVERSITY AMRITSAR

Advertisement No. 12/77

Applications are invited for the following posts on prescribed form obtainable (free of cost) from office of the Registrar, Guru Nanak Dev University, Amritsar by making a written request accompanied by self-addressed stamped envelope of 23 x 10 cms. so as to reach this office by 25-6-1977 alongwith crossed Indian Postal Order(s) for Rs. 7.50 for posts at Sr. No. 1 & 2 and Rs. 5/- for posts at Sr. No. 3 to 5 drawn in favour of Registrar, Guru Nanak Dev University, Amritsar. Application fee is not refundable.

Note: Persons already in employment must send their applications through their employers.

Grade (plus allowances as admissible under University rules)

1. Lecturers (temporary) for Job-Oriented Courses in Department of Chemistry (Rs. 700-40-1100-50-1600).

(i) Instrumentation (ii) Oils, Soaps and Detergents. (iii) Dyes and Dyeing Technology (iv) Paints and Varnishes (v) Heat Treatment (vi) Electroplating. (v) Curator in Biology (Rs. 400-40-800-50-950)

3. Research Assistant in (i) Political Science and (ii) for Oral History Cell (Rs. 300-25-350/25-400-30-610/30-640-40-800)

4. Research Fellows in Economics (2) and Mathematics (1) (Rs. 400/-p.m. fixed).

5. Junior Research Fellows (U. G. C.) in Economics (1) and English (1) (Rs. Rs. 400/-p.m. fixed)

QUALIFICATIONS:

Lecturers for Job-Oriented Courses (Sr. No. 1): Essential (i) A Doctor's degree or published work of an equally high standard (ii) Consistently good academic record with First or High Second Class (b+) Master's degree in the relevant subject or an equivalent degree of a foreign University. Additional For posts at Sr. No. 1 (ii) to (vi): Teaching/Research/Factory Experience.

SPECIALIZATION:

Post 1 (i) Electro Analytical or Spectroscopic Methods of Analysis.

Post 1 (ii) M.Sc. (Technology) in Oils Soaps.

Post 1 (iii) M.Sc. (Textile Chemistry)

Post 1 (iv) M.Sc. (Technology) in Paints & Varnishes.

Posts 1 (v) & (vi) M.Sc. Engineering (Mechanical).

Curator in Biology (Sr. No. 2):

(i) A good academic record with First or High Second Class Master's degree in Botany/Zoology. (ii) A mini-

mum of two years' research experience in Taxonomy.

Research Assistant in Political Science (Sr. No. 3(i): Essential

(i) Good academic record with (b+) Master's degree in Political Science. (ii) Evidence of research work done/apptitude for research. Desirable: Ph.D. or M. Phil. degree.

Research Assistant for Oral History Cell (Sr. No. 3 (ii): Essential

(i) Second Class Master's degree in a Social Science or a language. (ii) Knowledge of Punjabi and History upto atleast B.A. level. (iii) Experience of research and field work. Desirable: (i) Multilingual equipment. (ii) Skill in photography.

NOTE: The Research Assistant will be required to work in the field primarily to collect oral evidence and historical records in Persian, Punjabi and other Indian Languages.

Posts at Sr. No. 4 and 5:

(i) First or High Second Class Master's degree in the subject concerned with good academic record. (ii) Aptitude for research.

BHARPUR SINGH
REGISTRAR

ROHTAK UNIVERSITY ROHTAK

Advertisement No. 11/77

Applications are invited on plain paper (through proper channel in the case of those already in employment) for the following posts, giving complete bi-data i.e. name, date and place of birth, nationality permanent and correspondence addresses, academic and professional attainments from Matriculation onwards, indicating clearly percentage of marks obtained in each exam. upto the master's degree level alongwith attested copies of certificate/testimonials, list of publications and Research Project(s) undertaken, languages known, details of visits to foreign countries, if any, names and addresses of atleast two persons well acquainted with the academic and professional work, so as to reach the Registrar, Rohtak University, Rohtak on or before 6.6.1977. The applications should be accompanied with Indian Postal Order(s) for Rs. 7.50 for posts at Sr. No. 1 to 9 and Rs. 5.00 for the post of Sr. No. 10 and 11 drawn in favour of the Comptroller, Rohtak University, Rohtak payable at Rohtak Post Office. Ex-servicemen scheduled Caste/Tribes and Backward Classes candidates are exempted from application fee. The items given above in italics are applicable to teaching posts only. Attested copies of Certificates/testimonials required in other cases also.

1. Readers in English : 2 Grade Rs. 1200-50-1300-60-1900.

2. Lecturers in English : 2 (for the University Evening College, Rohtak).

3. Lecturers in Mathematics : 2 (including one for the University Evening College, Rohtak).

Grade: Rs. 700-40-1100-50-1600.

4. Lecturers in Commerce 2 (for University Evening College, Rohtak).

5. Lecturers in Chemistry: 2 (Physical and Inorganic Chemistry).

6. Lecturers in Hindi : 2 (for University Evening College, Rohtak).

7. Research Assistant : 1 in Mathematics.

Grade: Rs. 300-25-350 (Unrevised).

8. Type/Shorthand Instructor: 1 (for University Evening College, Rohtak).

Grade Rs. 250-15-300-40-425.

9. Lady Hostel Supervisor: 1

Grade Rs. 250-120-425.

10. Senior Scale Setaographers.

Grade Rs. 225-15-300-20-500.

11. Steno-typists.

Grade Rs. 110-4-150-5-160-5-225 plus Rs. 25 special pay.

The posts carry usual allowance as admissible under the University Rules in force from time to time. Higher start possible in deserving cases.

QUALIFICATIONS:

1. For Readers & Lecturers:

(i) Consistently good academic record with 1st or 2nd class Master's Degree (with atleast 55% marks) in the relevant subject or an equivalent degree of a foreign University; and

(ii) Either a Doctorate degree or an equivalent research degree or published work or an equally high standard.

2. For Research Assistants:

(i) Essential: (a) M.A./M.Sc. in Mathematics.

(b) Typing speed of 30 w.p.m.

(ii) Desirable: (a) Experience of working in a similar capacity in a University Research Institution.

- (b) Knowledge of French/German/Russian.
(c) Knowledge of Shorthand.

3. For Shorthand/Type Instructor:

Bachelor's Degree with a Diploma from a recognised Industrial Training Institute. Experienced hands will be preferred.

4. For Lady Hostel Supervisor:

A Bachelor Degree in Arts/Science/Commerce with B.T./B.Ed. Preference will be given to those who have supervised the working of a Girl's Hostel in a University or a College of repute.

5. For Senior Scale Stenographers:

Bachelor's Degree with 100 w.p.m. speed in English Shorthand and to transcribe them on the typewriter at a speed of 20 w.p.m.

6. For Steno-typists:

2nd class in Matriculation/Hr. Secondary/Pre-University examination with 80 w.p.m. speed in English Shorthand and 70 w.p.m. speed in type-writing.

SPECIALIZATIONS:

1. For Readers (English)

- American Literature OR Modern English Literature.
- Modern English Literature OR English Literature 1660-1798.

2. For Lecturer in Mathematics:

Pure Mathematics.

3. For Lecturer in Commerce:

- Industrial and Commercial Law.
- Financial Rules and Management.

4. (i) For Lecturer in Physical Chemistry:

Equilibrium or non-equilibrium thermodynamics, polymer Chemistry, solid state chemistry, spectroscopy, quantum chemistry, modern electro-chemistry.

(ii) For Lecturer in Inorganic Chemistry.

Analytical techniques in inorganic chemistry, coordination chemistry, tracer techniques, spectroscopic techniques (notably infrared and Raman) for the elucidation of bonding and structural features of inorganic and organometallic compounds.

EXPERIENCE:

FOR READERS:

At least five years teaching experience in Honours/Post-graduate classes OR Post-doctoral Research in a University or a College.

FOR LECTURERS:

Two years' teaching experience or Post-doctoral Research.

Qualifications and experience are relaxable in the case of exceptionally qualified persons.

REGISTRAR

LUCKNOW UNIVERSITY

Advertisement No. 9/1977

Applications are invited for the following posts:—

- One Professor of Psychology in the grade of Rs. 1500-60-1800-100-2000-125/2-2500.

QUALIFICATIONS:

Essential:-(a) A doctorate in the subject of study concerned or a published work of a high standard in that subject; and

(b) Consistently good academic record (that is to say, the overall record of all assessments throughout the academic career of a candidate) with first class or high second class (that is to say, with an aggregate of more than 54% marks) Master's degree in the subject concerned or equivalent degree of a foreign University in such subject.

Where the Selection Committee is of the opinion that the research work of a candidate, as evidenced either by his thesis or by his published work, is of a very high standard, it may relax any of the qualifications specified in sub-clause (b) of clause 1.

2. Experience of teaching post-graduate classes for not less than seven years and/or having conducted and successfully guided research work for seven years in a recognised Institution and having published work of high standard in the subject concerned.

Preferential-High academic distinctions.

Readers in the grade of Rs. 1200-50-1300-60-1900:

- One Reader in Hindi
- One Reader in Physics
- One Reader in Mathematics
- One temporary Reader in Botany
- One temporary Reader in Botany (Plant Nutrition)
- One temporary Reader in Geology

QUALIFICATION:

Essential:-(a) A doctorate in the subject of study concerned or a published work of a high standard in that subject; and

(b) Consistently good academic record (that is to say the overall record of all assessments throughout the academic career of a candidate) with first or high second class (that is to say, with an aggregate of more than 54% marks) Master's Degree in the subject concerned or equivalent degree of a foreign University in such subject.

Where the Selection Committee is of the opinion that the research work of a candidate, as evidenced either by his thesis or by his published work is of a very high standard, it may relax any of the qualifications specified in sub-clause (b) of clause 1.

2. Experience of teaching honours/Post-graduate classes for not less than five years and published research work of high standard in the subject.

Preferential:-Experience of teaching Post-graduate classes and guiding research.

Lecturers in the grade of Rs. 700-40-1100-50-1600:

- One Lecturer in Tibetan
- One Lecturer in Urdu
- One temporary Lecturer in Sociology
- One temporary Lecturer in Botany

QUALIFICATIONS:

Essential:-(a) A doctorate in the subject of study concerned or a published work of a very high standard in that subject; and

(b) Consistently good academic record (that is to say, the overall record of all assessments throughout the academic career of a candidate) with first class or high second class (that is to say, with an aggregate of more than 54% marks) Master's degree in the subject concerned or equivalent degree of a foreign University in such subject.

Where the Selection Committee is of the opinion that the research work of a candidate, as evidenced either by his thesis or by his published work is of a very high standard, it may relax any of the qualifications specified in sub-clause (b) supra.

Preferential:-Experience of teaching degree/honours/post-graduate classes for two years.

GENERAL:

For purposes of qualifications required for the above posts, the Degree obtained in a subject taught in a Department which is subsequently constituted into separate Departments, shall be deemed to be degree in the subject concerned for the newly constituted Departments.

Benefits of Provident Fund available as admissible under the rules on confirmation for permanent posts. Period of probation for permanent posts is one year. It is not necessary to fill any/all of the advertised posts.

For the posts of Lecturers, other things being equal preference will be given to Schedule Castes/Tribes candidates, who are considered fit. Such candidates should indicate in their applications that they belong to Scheduled Castes/Tribes, attaching certificate from the District Magistrate of the District to which they belong. No other certificate for this purpose will be entertained. In case of Scheduled Caste/Scheduled Tribe candidates interviewed by the Selection Committee, if suitable candidates are not available for appointment to the posts of Lecturers, the Selection Committee may recommend appointment of suitable candidate as Research Associate in the scale of Rs. 700-1300 for a period upto three years and these persons could later compete for the posts of Lecturers as and when vacancies occur.

Applications on the prescribed form (available on request, accompanied with

a self-addressed envelope of size 23 cm x 10 cm., free of cost, from the Office of the Registrar with recent testimonials, publications etc. should reach the Registrar, Lucknow University by Monday, June 27, 1977. The candidates who are in service must send their applications through proper channel. Applications Forms to outstation candidates will be issued by post upto Monday, June 20, 1977.

Sd/-
(B. N. Singh)
REGISTRAR

BANARAS HINDU UNIVERSITY (Advertisement No. 5/1977-78)

Applications are invited for the undermentioned posts. The benefit of Provident Fund/Pension, Dearness Allowance, House Rent Allowance and City Compensatory Allowance are admissible according to University Rules. The retirement age of University employees is 60 years. The appointment will be made on two years probation on all permanent posts. Higher starting salary within the grade is admissible to specially qualified and experienced candidates.

Applications will be entertained on the prescribed form duly supported with a Bank Draft or Crossed Indian Postal Orders for Rs. 7.50 in favour of the Registrar, Banaras Hindu University

221005 on receipt of Rs. 0.40 paise stamped self addressed envelope of 23 cm x 10 cm size. Candidates called for interview for these posts will be paid actual Railway fare by the Second class plus reservation charges for sleeper, if paid, and/or actual Bus fare from the present residence both ways by the shortest route as per University Rules. No other expenses will be paid.

Application for each post be sent separately alongwith attested copies of certificates in support of the qualifications and experience mentioned in the application and be addressed to the Registrar (Selection Committee Section), Banaras Hindu University, Varanasi-221005.

For the posts of Lecturers, other things being equal preference will be given to scheduled caste/scheduled tribes candidates who are considered fit.

Incomplete application in any respect will not be entertained for consideration.

Those who are in service should apply through proper channel. M. O. or cheque will not be accepted towards the application fee.

The declaration columns 2 (A) and (B) relating to association with the then banned organisations have been deleted from the revised application forms for all posts.

THE LAST DATE FOR RECEIPT OF APPLICATIONS IS 24TH JUNE, 1977.

NOTE: Those who have applied earlier in response to our previous advertisements for these posts, need not apply again.

INSTITUTE OF MEDICAL SCIENCES

1. READER IN OBST. & GYNAECOLOGY (Two)

Grade Rs. 1200-50-1300-60-1900 plus N.P.A. as per rules
Qualifications Essential: (1) M.B.B.S. or equivalent qualification recognised by the Medical Council of India. (2) M.D. (Obst. & Gyn.), M.S. (Obst. & Gynaec.), M. O. M.R.C.O.G., Speciality Board of Obst. & Gynaecology (U.S.A.). (3) Teaching experience as Asst. Professor/Lecturer in Obst. & Gynaecology for 3 years in a Medical College.

2. READER IN SKIN & V. D. (One)

Grade: Rs. 1200-50 1300-60-1900 + N.P.A. as per rules
Qualifications Essential: (1) M.B.B.S. Degree or equivalent qualification recognised by the Medical Council of India. (2) M.D. (Dermatology & Venereology) M.R.C.P. (with Dermatology as special subject) or M.R.C.P. with D.V.D. or M.D. (General Medicine) with D.V.D. (3) Three years teaching experience as Asst. Professor/Lecturer in the subject in a Medical College. Desirable: (1) Research publications in standard journals

3. READER IN TUBERCULOSIS & CHEST DISEASES (One)

Grade: Rs. 1200-50-1300-60-1900 + N.P.A. as per rules
Qualifications Essential: (1) M.B.B.S. Degree or equivalent qualification recognised by the Medical Council of India. (2) M.D. (Tuberculosis), M.D./M.R.C.P. in Medicine with T.D.D., D.T.C. or D.T.C.D. (3) Three years teaching experience as Asst. Professor/Lecturer in Tuberculosis in a Medical College. Desirable: (1) Research publications in standard journals.

4. READER IN CLINICAL PSYCHOLOGY (One)

Grade: Rs. 1200-50-1300-60-1900
Qualifications Essential: (1) A first or second class Master's Degree in Psychology with specialisation in Clinical Psychology and a Diploma in Medical and Social Psychology (D.M.S.P.). (2) Ph.D. Degree in Clinical or Abnormal Psychology and/or published work of a high merit in reputed journals. (3) About five years teaching experience in any recognised Institution or five years research experience in any mental Hospital/psychiatric Clinic/Child Guidance Clinic.

5. LECTURER IN MICROBIOLOGY (One)

Grade: Rs. 700-40-1100-50-1600 (plus N.P.A. admissible only to Medical Graduates)
Qualifications Essential: (1) M.B.B.S. or equivalent qualification recognised by

the Medical Council of India. (2) M.D. M.Sc./D.Phil./D.Sc. in Microbiology. (3) The requisite recognised P. G. qualification in the subject and 3 years teaching experience as Tutor/Demonstrator in Microbiology of which one year should be after Post-graduate qualification.

OR: FOR NON-MEDICAL: (1) First class M.Sc. in Microbiology Ph.D. or D.Sc. in Medical Microbiology. (2) About 3 years teaching experience in medical microbiology in a recognised medical Institute (after requisite Post-graduate qualification). Desirable: (1) Publications in Medical Microbiology.

6. LECTURER IN PATHOLOGY (Two)

Grade: Rs. 700-40-1100-50-1600 + N.P.A. admissible as per rules.
Qualifications Essential: (1) M.B.B.S. Degree or equivalent qualification recognised by the Medical Council of India. (2) Post-graduate Degree in Pathology, M.D., Ph.D., D.Sc., M.Sc., Speciality Board of Pathology U.S.A. OR M.D. (Medicine)/M.R.C.P./F.R.C.P. with D.E. D.C.P./D.Path., M.R.C.P. (with Pathology as special subject) or an equivalent qualification. (3) About two years teaching experience as Demonstrator or equivalent post in Pathology in a recognised Medical Institute or Hospital. Desirable: (1) Research Publications in the subject. (2) Experience in Histopathology work.

7. LECTURER IN MEDICINAL CHEMISTRY (One)

Grade: Rs. 700-40-1100-50-1600.
Qualifications Essential: (1) Consistently good academic record with first or high second class (B +) M.Sc. Degree in Chemistry or M.Pharm. Degree with specialisation in Pharmaceutical Chemistry or an equivalent degree of a foreign University. (2) Three years research or teaching experience in the subject in a recognised Medical College. Desirable: (1) A Doctor's Degree or published work of an equally high standard. (2) Experience of standardisation of drugs. (3) Research experience in Chemistry of medicinal plants, as evidenced by published work in standard scientific journals.

NAGPUR UNIVERSITY Employment Notice

Combined Advertisement E & F See detailed note below

Applications are invited for the following posts in the University Department so as to reach the undersigned on or before Friday, the 24th June, 1977.

1. Professor (1) Law and (2) Biochemistry (One each).

II. Reader: (1) Law (3 posts), (2) Microbiology, (3) Cellulose Technology, (4) Geology (Exploration Geo-chemistry), (5) Chemistry (Nuclear Chemistry), (6) Petro-Chemical Technology, (7) Organic Technology, (8) Ancient Indian History, Culture and Archaeology, (9) Marathi, (10) Business Management and (11) Home Science (One each).

III. Lecturer: (1) Law (2 posts-1 post for Post-graduate Deptt. of Law and 1 post for Law College), (2) Microbiology (2 posts), (3) Cellulose Technology, (4) Geology (Exploration Geochemistry), (5) Chemistry (Analytical Chemistry), (6) Mathematics, (7) History, (8) Zoology (Entomology) (One each), (9) Education (2 posts)—Post-graduate Deptt. of Education, (10) Home Science (Economics) and (11) Petro-Chemical Technology (One each).

Scale of Pay:

- (I) Professor: 1100-50-1300-4-1600
(II) Reader: Rs. 700-50-1250
(III) Lecturer: Rs. 400-40-800-50-950.

(Note—The above scales are likely to be revised as per U.G.C. recommendation).

Qualifications:

(i) Professor: (i) A Scholar of eminence with a Doctorate Degree of recognised University in the subject concerned with research publications of merit;

(ii) Consistently good academic record with First or High Second Class (B+) Master's Degree in the relevant subject of a recognised University or equivalent degree of a Statutory Institute;

(iii) Ten years' teaching experience out of which minimum of 5 years should be of Post-graduate teaching and research/professional experience in the subject concerned;

(iv) Proved experience of guiding doctoral level research.

(Note:—For the post of Professor in Law, the candidate must have Doctorate Degree of a recognised University in the subject concerned or published research work of an equally high standard. Other qualifications will be the same as above).

II Reader (Except for the post of Reader in Cellulose Technology).

(i) Doctorate Degree of a recognised University in the subject concerned;

(ii) Consistently good academic record with First or High second Class (B+) Master's Degree in the relevant subject of a recognised University or equivalent degree of a statutory Institute;

(iii) (a) Not less than 5 years' experience of the teaching upto Degree classes.
(b) Post-graduate teaching experience shall be given preference.

(iv) Capacity to guide doctoral level research.

(Note:—(I) For the post of Reader in Cellulose Technology;

(i) the candidate must have First Class Bachelor's degree in Chemical Engineering or Chemical Technology (in Cellulose Technology) or Textile Technology or M.Sc. at least Higher Second Class in Organic Chemistry;

(ii) Ph.D. in any of the above Branches with or without Master's Degree in Chemical Engineering or Chemical Technology;

(iii) At least one year experience in Cellulose Industries or Cellulose based industries.

(2) For the post of Reader in Business Management:

(i) Consistently good academic record with First or High Second Class (B+) Master's Degree in Business Administration/Economics/Commerce of a recognised University or equivalent degree of a statutory Institute. Other qualifications will be the same as (above).

(III) Lecturer:

(i) Doctorate Degree of a recognised University in the subject concerned or published research work of an equally high standard;

(ii) Consistently good academic record with first or high second Class (B+) Master's Degree in the relevant subject of a recognised University or equivalent degree of a recognised University or Statutory Institute.

(iii) Persons having teaching experience at least upto degree classes will be preferred.

Note:—(I) For the posts of Lecturer in Law:

(i) The candidate must have Degree of LL.M. in first or high second class;

(ii) Teaching experience of 5 years in Law College;

(2) For the post of Lecturer in Cellulose Technology;

(i) the candidate must have 1st Class Bachelor's Degree in Chemical Engineering or Chemical Technology or Textile or M.Sc. at least Higher Second Class in Organic Chemistry;

(ii) Post-graduate Degree in Chemical Engineering or Chemical Technology or Textile Technology or Ph.D. in Organic Chemistry.

(3) For the post of Lecturer in Home Science, candidate must be post-graduate in Economics and degree in Home-Science will be an additional qualification.

(A) For the post of Professor and Reader, the Selection Committee may relax the above qualifications in case of otherwise exceptionally qualified candidate, only if the candidates with aforesaid qualifications are not available and if not considered suitable.

(B) For the post of Lecturer, the Selection Committee may relax the above qualifications in case of otherwise exceptionally qualified candidates, only if the candidates with aforesaid qualifications are not available and if not considered suitable. Provided that candidate if selected for the post of Lecturer, will have to acquire the prescribed qualifications within five years from the date of their appointment.

At first instance all the above posts as per advertisement 'E' will be treated as reserved for backward communities, SC/ST/VJ/NT/OBC and if suitable candidates are not found from th Backward Communities candidates as per advertisement 'F' will be considered on general merit.

Separate applications are necessary for both 'E' and 'F' advertisements, as advertisement 'E' is exclusively for Backward Communities.

Eight copies of prescribed application forms with particulars of details of qualifications, specialisations, etc. will be supplied on payment of non-refundable fee of Rs 5/- by Crossed Indian Postal Order payable to the undersigned alongwith self-addressed envelope bearing postal stamps worth 00.70 paise.

Last date for supply of blank forms—**15th June, 1977 (Wednesday).**

**Nagpur
25th May, 1977**

**B. Y. Aher
Registrar**

ALIGARH MUSLIM UNIVERSITY

Advertisement No. 4/77-78

Applications, on the prescribed form, are invited for the following posts:

Candidates must possess Medical Qualifications included in 1st or 2nd Schedule or Part II of the 3rd Schedule (other than licentiate qualifications) of the Indian Medical Council Act, 1956. Holders of educational qualifications included in Part II of 3rd Schedule should fulfil the conditions stipulated in Section 13 (3) of the Indian Medical Council Act, 1956. Must possess a basic University or equivalent qualification entered in Schedules under State/Central Medical Registration Act (For the posts at Sl. Nos. 1 & 2 only).

1. Reader in Pathology, J. N. Medical College, Scale Rs. 1200-50-1300-60-1900 plus allowances.

Qualifications:

M. D. (Pathology), M.D. (Pathology/Bacteriology), M.D. (Pathology with Bacteriology), M.R.C. Path. (London) after examination M.C.P. (Australia) after examination.

As Assistant Professor/Lecturer in Pathology for three years in a Medical College. (Experience in Advance Haematology & Immuno-Haematology).

2. Lecturers in Microbiology (2 posts). Scale Rs. 700-40-1100-50-1600 plus allowances.

Qualifications:

M.D. (Bacteriology)/M. D. (Microbiology)/M. D. (Bacteriology with pathology)/M. D. (Pathology & Bacteriology)/M.Sc. (Bacteriology)/M.Sc. (Microbiology)/Ph.D. (Bacteriology)/Ph.D. (Microbiology)/ D.Sc. (Bacteriology)/D.Sc. (Microbiology).

The requisite postgraduate qualifications in the subject and three years teaching experience as Tutor/Demonstrator in Bacteriology/Clinical Pathologist/Resident Pathologist of which one year should be after postgraduate qualification.

Desirable:

Experience as a Lecturer.

3. Reader in Moalljat-e-Tib, A. K. Tibbiya College, Scale Rs. 1200-50-1300-60-1900 plus allowances.

Qualification:

(i) B.U.T.S., B.U.M.S., B.U.M.M.S., D.U.M., M.D. (Unani) or equivalent

degree or Diploma; (ii) Five years teaching experience in the speciality concerned; (iii) Knowledge of Arabic & English.

Desirable:

- (i) Published work in Moallijate-Tib;
- (ii) Practice in Unani Medicine; and
- (iii) Research Work.

4. Professor of Statistics (Information Theory)-Plan Post Scale Rs. 1500-60-1800-100-2000-125-2-2500 plus allowances

Qualifications:

(a) A first or a high second class Master's Degree in Statistics of an Indian University or equivalent foreign qualification; (b) A research degree of a doctorate standard or published work of a high standard; and (c) At least ten years experience of teaching Postgraduate classes and guiding research.

5. Professor of History. Scale Rs. 1500-60-1800-100-2000-125-2-2500 plus allowances. (Temporary but likely to become permanent).

Qualifications:

(a) A first or a high second class Master's Degree in History of an Indian University or an equivalent foreign qualification; (b) A research degree of a doctorate standard or published work of a high standard; and (c) At least ten years experience of teaching Postgraduate classes and guiding research.

6. Reader in Central Asian History. Scale Rs. 1200-50-1300-60-1900 plus allowances. (Plan Post).

Qualifications:

(a) A first or a high second class Master's Degree in the subject concerned of an Indian University or equivalent foreign qualifications; (b) A research degree of a doctorate standard or published work of a high standard; and (c) At least five years experience of teaching postgraduate classes and some experience of guiding research.

Desirable:

Knowledge of Persian/Russian.

7. Reader in Linguistics (Psycholinguistics)-Plan Post. Scale Rs. 1200-50-1300-60-1900 plus allowances.

Qualifications:

(a) A first or a high second class Master's Degree in the subject concerned of an Indian University or an equivalent foreign qualifications; (b) A research degree of a doctorate standard or published work of a high standard; and (c) At least five years experience of teaching Postgraduate classes and some experience of guiding research.

8. Reader in Law (Mercantile Law)-Plan Post. Scale Rs. 1200-50-1300-60-1900 plus allowances.

Qualifications:

(a) A first or a high second class Master's Degree in the subject concerned of an Indian University or an equivalent foreign qualification; (b) A research degree of a doctorate standard or published work of a high standard; and (c) At least five years experience of teaching Postgraduate classes and some experience of guiding research.

9. Reader in Philosophy (temporary but likely to become permanent). Scale Rs. 1200-50-1300-60-1900 plus allowances.

Qualifications:

(a) A first or a high second class Master's Degree in Philosophy of an Indian University or an equivalent foreign qualifications; (b) A research degree of a doctorate standard or published work of a high standard; and (c) At least five years experience of teaching Postgraduate classes and some experience of guiding research.

Desirable:

History of Philosophy/Comparative Philosophy.

Prescribed application forms and instructions may be had from the Deputy Registrar (Executive) either personally or by sending a self-addressed envelope of 23 x 10 cm. Last date for receipt of applications is 10th June, 1977. Incomplete applications and those received late may not be considered.

Higher initial start may be given to candidates possessing exceptional qualifications and experience. Candidates interviewed may be paid contribution towards their T.A. equal to one single second class railway fare only.

**Jamalur Rahman
Registrar**

**GAUHATI UNIVERSITY
GAUHATI-14**

Advertisement No. 4 of 1977

Applications are invited for the following posts:

1. Professor of Library Science: One post (permanent).

2. Professor of Law: On post (permanent).

3. Professor of Business Administration: Two posts (5th Plan).

4. Reader in Business Administration: Three posts (5th Plan)

5. Reader in English: One post (5th Plan). Spl: Method of English teaching.

6. Reader in History: One post (permanent).

Spl:—Ancient Mediaeval History of of Assam. Preference will be given to one having experience of teaching and guiding research in History of Ancient Assam.

7. Reader in History One post (5th Plan). Spl:—Economic History of India.

8. Reader in Zoology: One post (5th Plan). Spl:—Ecology.

9. Reader in Library Science: One post (permanent).

10. Reader in Commerce: One post (permanent).

11. Lecturer in English: One post (permanent).

12. Lecturer in History: One post (permanent). Spl: Mediaeval History of India.

13. Lecturer in Physics: Two posts (temporary). Spl: Electronics.

14. Lecturer in Zoology: Two posts (one permanent & the other temporary). Spl: For permanent post special training in Animal Genetics and for temporary post Cell Biology.

15. Lecturer in Library Science: One post (permanent).

16. Lecturer in Business Administration: Five posts (5th Plan).

17. Lecturer in Assamese: One post (permanent). Spl:—M.A. in Sanskrit Literature.

Scales of Pay:

Professor: Rs. 1500-60-1800-100-2000-125-2-2500.

Reader: Rs. 1200-50-1300-60-1900

Lecturer: Rs. 700-40-1100-50-1600.

All posts carry usual allowances admissible under University rules in force from time to time.

In case where specialisation has not been mentioned against a post candidates should state their areas of specialisation at the Master's and Doctor's degree levels.

Essential Qualification:

Professor of Library Science: (a) A recognised scholar in the subject with Doctor's degree or equivalent published work, (b) Continuous research work of merit as evidenced by published papers in standard journals or published work of merit. (c) Experience of 10 (ten) years post-graduate teaching or 15 (fifteen) years Honour's teaching and (d) Experience in guiding and promoting research.

Note:—In case of a candidate of exceptional abilities with outstanding research contributions the requirement of teaching experience may be suitably relaxed.

Professor of Law:—(a) Consistently good academic record with first or High Second Class (B+) Master's degree in Law or any equivalent degree of a foreign University. (b) Experience of 10 (ten) years post-graduate or 15 (fifteen) years undergraduate teaching. (c) Experience in guiding and promoting research. Preferential:—A Doctor's degree in Law or published work of an equally high standard.

Professor of Business Administration: (a) A recognised scholar in the subject with Doctor's degree or equivalent published work, (b) Continuous research work of merit as evidenced by published papers in standard journals or published work of merit, (c) Experience of 10 years post-graduate teaching or 15 (fifteen) years Honours teaching or 15 years professional experience, (d) Experience in guiding and promoting research.

Note:—In case of candidate of exceptional abilities with outstanding research contributions the requirement of teaching experience may be suitably relaxed.

Reader:—(Arts, Science & Library Science):—(a) A Doctor's degree or published work of an equivalent high standard, (b) Consistently good academic record with first or High Second Class (B+) Master's degree in a relevant subject or any equivalent Degree of a foreign University, (c) Evidence of continuous research and (d) Experience of 5 years post-graduate teaching or 8 years Honours teaching.

Reader (Commerce & Business Administration):—(a) Consistently good academic record with first or high second class (B+) Master's degree in a relevant subject or any equivalent degree of a foreign University (b) A Doctor's degree

or published work of an equivalent high standard of other professional qualification, (c) Evidence of continuous research and (d) Experience of 5 years' post-graduate teaching or 8 years Honours teaching or 10 years professional experience.

Lecturer (Arts, Science, Library Science & Business Administration): (a) A Doctor's degree or published work of an equally high standard and (b) Consistently good academic record with first or high second class (B+) Master's degree in a relevant subject or an equivalent degree of a foreign University.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of the qualifications prescribed in (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent published work is not available or is not considered suitable a person possessing a consistently good academic record (due weightage being given to M.Phil. or equivalent degree or research quality) may be appointed on the candi-

Deputy Commissioner/District Magistrate, if they belong to Scheduled caste or Scheduled tribe.

Candidates will be required to appear at an interview if and when called for. Persons who had applied in response to Advt. No. 4 and 9 of 1976 for posts of Reader and Lecturer in English need not apply again. Their cases will be considered on the basis of the earlier applications.

Canvassing directly or indirectly will be a disqualification.

GURU NANAK DEV UNIVERSITY AMRITSAR

Advertisement No. 5/77

Applications are invited for the following posts on prescribed form obtainable (free of cost) from office of Registrar, Guru Nanak Dev University, Amritsar by making written request accompanied by self-addressed stamped envelope of 23 x 10 cms. so as to reach this office by 6-6-1977 alongwith Indian Postal Order (s) for Rs. 7.50 for posts at Sr. No 1 to 3 and Rs. 5/- for posts at Sr. No 4 drawn in favour of Registrar, Guru Nanak Dev University, Amritsar. Application fee is not refundable.

NOTE: Persons already in employment should send their applications through their employers, otherwise these will not be entertained.

Grade (plus allowances as admissible under rules).

1. Director of Physical Education (Rs. 700-50-1000/50-1250).
2. Public Relations Officer (temporary) (Rs. 400-40-800/50-950).
3. Manager University Press (Rs. 400-40-800/50-950).
4. Steno-typist (English) Rs. 120-5-150/10-250 plus Rs. 25/- as a special pay.

Qualifications: For post at Sr. No. 1: Essential: (i) Atleast Second Class Master's degree in Physical Education with atleast 50% marks or an equivalent degree. (ii) 5 years' teaching or administrative experience in college/University of teaching/organising inter-collegiate sports. (iii) Qualified/efficient in coaching one or two major games. (iv) Age between 30 to 50 years.

Preferable: Inter-University/State/National representation in a game or sports.

For post at Sr. No. 2: (i) Master's degree with atleast Second Class Diploma in Journalism. (ii) Atleast 5 years' experience as Journalist in a newspaper or news-agency or a publicity organisation.

Note: Higher starting pay can be given to a deserving candidate. Condition at (ii) above is relaxable.

For post at Sr. No. 3: (i) Graduate from an Indian University or an equivalent

qualification from a foreign University. (ii) Diploma Course in Printing Technology from a recognised Institution. (iii) At least 5 years practical experience of working in a first rate printing press.

Note: Qualifications (i) and (ii) may be relaxed in case of persons with exceptionally long practical experience.

For Posts at Sr. No. 4: (i) Atleast second division Matric or Higher Secondary. (ii) Shorthand speed in English atleast 80 W.P.M. and typewriting speed atleast 40 W.P.M. (iii) Knowledge of Punjabi upto Matric standard.

**BHARPUR SINGH
REGISTRAR**

SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar
Via Anand

Gujarat State

Notification No. Est/1 (1977-78)

Applications in the prescribed forms available from the University Office on payment of Re. 1/- in cash or by Indian Postal Order are invited for the following posts so as to reach the undersigned on or before 20-6-1977.

I. Teaching posts in the University post-graduate Departments:

(A) Professors: (Grade: Rs. 1500-60-1800-100-2000-125/2-2500)

- (i) Physics: in Solid State Theory, Solid State Electronics, Quantum Electronics.
- (ii) Hindi

(B) Readers: (Grade: Rs. 1200-50-1300-60-1600-Assessment—60-1900)

- (i) Life Sciences: Two posts, one each in Bio-Chemistry and Plant Physiology.
- (ii) Statistics
- (iii) Home Science: in Foods and Nutrition.

(C) Lecturers: (Grade: Rs. 700-40-1100-50-1300—Assessment—50-1600)

- (i) Life Sciences: Three posts, one each in Environmental Biology or Ecology, Zoology and Microbiology.
- (ii) Home Science: in Foods and Nutrition.

II. Non-teaching posts in the university:

(i) Technician—for Physics Department: (Scale of pay: Rs. 700-40-1020-EB-45-1200-50-1300-EB-50-1500)

(ii) Stenographer: (English/Gujarati): (Scale of pay: Rs. 475-20-615-EB-20-675-25-800)

(iii) Steno-Typist: (Gujarati): (Scale of pay: Rs. 260-6-308-EB-6-326-8-350-EB-8-390-10-400)

(iv) Junior-Typist: (Scale of pay: Rs. 260-6-308-EB-6-326-8-350-EB-8-390-10-400)

Christian era. (4) (a) Permanent residence and address (in full). (4) (b) Present address (in full). (5) Present occupation if any and name of employer. (6) Present salary drawn (if any). (7) Detailed academic career with mark-sheets and subject studies (including Honours) in degree and post-graduate courses from Matriculation/Higher Secondary/High School Leaving Certificate Examination onwards and copies/reprints of research contributions. (8) Name and address of two referees not related to the candidate together with an application fee of Rs. 10/- (ten) (Rs. 7.50 in case of Scheduled caste/Scheduled tribe candidates) by Crossed Indian Postal Order drawn in favour of Gauhati University payable at the Gauhati-781014 post office should be sent in an inner sealed cover superscribed application for post of (Name of post applied for) Advt. No. 4 of 1977 enclosed in an outer cover addressed to Sri K. C. Bhattacharyya, M.A. (Cal.) Registrar, Gauhati University, Gauhati-781014 to reach him not later than 15th June, 1977.

The number of this advertisement and name of the post applied for must be referred to in application. Persons in employment should apply through proper channel or with a no objection certificate from the present employer.

The University has accepted the principle of reservation of posts for Scheduled caste and Scheduled tribe candidate, according to the norms of the State Govt. Candidates should submit necessary certificate from the

III. For C.S.I.R. Research Scheme Junior Research Fellow: Rs. 400/- fixed.

Details regarding qualifications, experience, etc., will be supplied alongwith the application forms. Preference will be given to the qualified candidates belonging to Scheduled Castes/Scheduled Tribes.

Persons who had applied earlier need not apply again.

K. A. AMIN
REGISTRAR

MADURAI UNIVERSITY

No. 2/V/Advt./77.
Notification

Applications in the prescribed form are invited in the University Departments for the posts of One Professor in Geography, One Professor each in Econometrics, Ancient History, Human Geography, Sociology; Two Readers in French; One Reader each in English, Medieval History, Education, Political Science, Immunobiology, Bio-Chemistry, Plant Physiology, Microbiology, Environmental Biology, Applied Mathematics; Two Lecturers in Mathematics; One Lecturer each in Mathematical Economics, Economics, Geography, Animal Physiology, Botany, Molecular Biology, Plant Ecology, Plant Physiology, Genetics; Two Lecturers in Physical Chemistry; Two Lecturers in Organic Chemistry and One Professor of History in the Institute of Correspondence Course and Continuing Education

Scale of Pay:

Professor: Rs. 1100-50-1300-	The UGC
60-1600	Scales of
Reader: Rs. 700-50-1250	pay will be
Lecturer: Rs. 400-40-800-50-	given on
950	approval by the Government
	shortly.

Higher starting salary will be offered in deserving cases.

Preference would be given to Scheduled Caste/Tribe candidates who are considered fit in respect of posts of Lecturers.

A minimum of Ten years' teaching experience for Professors, Five years' teaching experience for Readers and Three years' teaching experience for Lectures at the Post-Graduate level is essential.

The prescribed form of application and full details regarding qualification, field of specialisation and experience required can be got from the undersigned on requisition accompanied by (1) a self-addressed envelope with postage stamps to the value of 0.55 paise affixed thereon and (2) State Bank of India Challan for Rs. 5/- (Account No. 1) or Demand Draft for Rs. 5/- payable at Madurai drawn in favour of Registrar, Madurai University, Madurai-625 021.

The last date for receipt of applications is 15-6-1977. Applications received after the due date will not be considered.

Palkkalamangar, B. MURUGAN
MADURAI-625021 REGISTRAR

GURU NANAK DEV UNIVERSITY
AMRITSAR

Advertisement No. 9/77

Applications are invited for the following posts on prescribed form obtainable (free of cost) from office of

sity, Amritsar by making written request accompanied by self-addressed stamped envelope of 23 x 10 cms. so as to reach this office by 17.6.1977 alongwith crossed Indian Postal Order(s) for Rs. 7.50 for posts of Readers and Lecturers and Rs. 5/- for posts of Research Assistants drawn in favour of Registrar, Guru Nanak Dev University, Amritsar. Application fee is not refundable.

NOTE: Persons already in employment must send their applications through their employers.

Departments of Punjabi Language, Literature & Culture & Guru Nanak Studies.

Readers (2) Lecturers (9) and Research Assistants (2)

Qualifications:

Readers (Grade Rs. 1200-50-1300-60-1900).

1. Common Qualifications

- (i) Consistently good academic record with first or high second class (b+) Masters degree of an Indian University or an equivalent qualification of a foreign University in the relevant subjects.
- (ii) Either the degree of Ph. D. or an equivalent Research Degree or published Research work of a high standard relating to any major field of Punjabi Language/Literature/Culture.
- (iii) About five years' experience of teaching Post-graduate classes and guiding research.

2. Special Qualifications

Post I

- (i) Essential: Master's degree in Punjabi/Cultural Anthropology/Culture with the proviso that an M.A. in Punjabi should have a rich grounding in Folklore and the one in Cultural Anthropology/Culture should have good knowledge of Punjabi.
- (ii) Preferable: Experience of field work in culture/Folkloristics, Knowledge of Hindi/Urdu/Persian.

Post II

- (i) Essential: Master's degree in Linguistics / Sanskrit / Prakrit / Apabhramsa/Comparative Philology, with the proviso that the candidate must be thoroughly conversant with Punjabi Language, and its scripts and be able to apply theories of Modern Linguistics to the study and development of Punjabi.
- (ii) Preferable: Specialization in Etymology/Grammar / Stylistics/ socio-Linguistics. Knowledge of dialects of the area adjoining the Present day Punjab.

Lecturers (Grade Rs. 700-40-1100-50-1600)

1. Common qualifications

- (a) A Doctor's degree or published work in the relevant field of an equally high standard: and
- (b) Consistently good academic record with 1st or high 2nd class (b+) Masters degree in the relevant subject or an equivalent degree of a foreign University.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work, is of a very high standard

prescribed in (b) above.

2. Special qualification

Post 1 & 2

- (i) Essential: Master's degree in Anti. Hist. and Cul./Fine Arts/Cultural Anthro./Soc. with a good knowledge of Punjabi, or a Master's degree in Punjabi with a good knowledge of any of the above subjects.

- (ii) Preferable: Some practical experience in the field of folklore.

Post 3 & 4

- (i) Essential: Masters degree in Punjabi and at least 5 years practical experience in the field of editing/verifying/translation.

- (ii) Preferable: (a) Acquaintance with latest trends in Literary criticism; (b) Proficiency in reading manuscripts in Gurmukhi; (c) Knowledge of book production and proof-reading.

Post 5

- (i) Essential: Master's degree in Punjabi with proven proficiency in Modern Linguistics or Masters degree in Sanskrit/Modern Linguistics with a good knowledge of Punjabi.

- (ii) Preferable: Knowledge of Iqbal Geography and applied Linguistics

Posts 6 to 8

- (i) Essential: Masters degree in Urdu. Experience of translating high medieval Punjabi or Hindi Literature into Urdu. Knowledge of Punjabi and of Sikh Scriptures.

- (ii) Preferable: Proficiency in Sanskrit, Hindi/Persian.

Notes: (1) Established creative writers, with thorough knowledge of Sikh Scriptures Punjabi/Hindi, who do not fulfil all the prescribed conditions may be considered if persons with requisite qualifications are not available. (2) Persons who had already applied in response to advertisement No. 21/76 of this University need not apply again.

Post 9

- (i) Essential: Masters degree or an equivalent degree of a foreign University in Philosophy/Punjabi/English. (ii) Either the degree of Ph.D. or an equivalent Research Degree or published Research work of high standard on any philosophical or religious subject relating to Gurmukhi.

- (ii) Preferable: Proficiency in Sanskrit/Hindi/Persian.

Research Assistant (Grade Rs. 300-25-350/25-400-30-610/20-640-40-800).

1. Common qualification:

Consistently good academic record with 1st or High 2nd Class (b+) Master's degree in a relevant subject or an equivalent degree of a foreign University.

Special qualifications:

Post 1:

Master's degree in Punjabi with an aptitude for field work and folklore studies.

Post 2:

Master's degree in Linguistics and/or Punjabi with the proviso that M.A. one must have proficiency in the other.

DHARPUN SINGH
REGISTRAR

THESES OF THE MONTH

A list of Doctoral Thesis Accepted by Indian Universities

SOCIAL SCIENCES

Psychology

1. Kocher, Harish Chandra. Measurement and correlates of hostility. University of Poona.

Anthropology

1. Biswas, Asok Kumar. Religious complex in a metropolitan fringe. University of Calcutta.
2. Dutta, Bela. Urbanism and urban social structure. University of Calcutta.

Political Science

1. Bandyopadhyay, Arunkumar. Problem of National integration in Malaya with special reference to the citizenship system between Malayan Union and Mardeka. University of Calcutta.
2. Bandyopadhyay, Chittaranjan. A study of sociological import of rural indebtedness in the district of 24-Parganas, West Bengal. University of Calcutta.
3. Baral, Jaya Krishna. The role of the pentagon in foreign policy making with reference to Vietnam: The McNamara Era. Jawaharlal Nehru University.
4. Basu, Sujal Kumar. Politics of violence: Studies with reference to West Bengal. University of Calcutta.
5. Chakrabarty, Santosh Kumar. The evolution of politics in Bangla Desh since 1947. Sambalpur University.
6. Datta, Satyabrata. Bengal legislature, 1862-1920. University of Calcutta.
7. Jagtap, Sitaram Rodaji. Communication process in Indian democracy with special reference to economic development. University of Poona.
8. Kelkar, Govind. S. Political communications and mass mobilization in the Shan-Kan-Ning Border Region, China, 1937-1945. University of Delhi.
9. Saikia, Padma Kumar. The administration of panchayat in Assam in the Kamrup District. Gauhati University.
10. Saini, Ram Singh. United States relations with South Africa with special reference to the issue of Apartheid, 1953-63. Jawaharlal Nehru University.

Economics

1. Dixit, M. R. Role of corporation tax policy in the fixed-asset investment behaviour of large private corporations in India: A micro-Economics study. I. I. T., Kanpur.
2. Lahiri, Supriya. An investment programming model for the electric power industry in Northern India. University of Delhi.
3. Naganathan, M. Federal financial relations in India: A study in relation to loans and grants-in-aid. University of Madras.
4. Nirmal Kumari. Small scale manufacturing in Jammu and Kashmir State, 1950-1971. University of Jammu.

Law

1. Venkatramiah, K. Some aspects of the law relating to International Civil Aviation. Jawaharlal Nehru University.

Education

1. Choksi, Amita Jayendra. Effects of psychological education inputs on the academic performance of primary school children. M. S. University of Baroda.
2. Sukhwai, Kailash Devi. Attitudes of married lady teachers towards the teaching profession. University of Udaipur.

Commerce

1. Balamohandas, Viswanadhuni. Ancillary industrial development: A case study of Ancillary industrial units in Visakhapatnam. Andhra University.
2. Chaudhuri, Aseshkanta Bandyopadhyay. Control and valuation of work in progress: A case study in pump manufacturing industries. University of Calcutta.
3. Pandey, Prabhakar. Chattisgarh ke arthik vikas mein sahakari adhikoso ke bhumi. Ravishankar University.
4. Patel, M. L. Optimal locations of market centres for balanced regional development of Mandla (Tribal) District. Bhopal University.
5. Subrahmanyam, Gopalam. University finances: A case study of Andhra, University, Visakhapatnam. Andhra University.
6. Sundaram, G. Commercial policy of the European Economic Community and the association agreements. University of Delhi.
7. Verma, Raghunath Pd. Worker's participation in management: A study of public sector and private sector. University of Bihar.

HUMANITIES

Philosophy

1. Bitos, Theodore George. The philosophy of Advaita as expounded in the Svarajya Siddhi of Gangadharendra Sarasvati. University of Madras.
2. Hegde, Venkataratnam Subray. Gandhi's philosophy of law. Karnataka University.
3. Nighoskar, Yogini Govindrao. Universals and particulars: An essay in contextual analysis. M.S. University of Baroda.
4. Phadnis, Hemlata Suryakant. Critical examination of Mill's theory of utilitarianism. University of Poona.

Literature

English

1. Chakrabarti, Syamsundar. The common man in the poetry of Wordsworth and the fundamental difference between Wordsworth and other romantic poets in their treatment of the common man. University of Calcutta.
2. Choudhury, Subhransu Ray. T. S. Eliot and modern Bengali poetry: A study of four major modern Bengali poets. Gauhati University.
3. Raybhaumik, Harendrakisor. Henry James as a dramatist. University of Calcutta.
4. Sharma, Ram Padarth. I. A. Richards, theory of Language. University of Bihar.

Sanskrit

1. Arya, Sushma Kumari. Pauranik chintan ke alok mein Bhoj ke yuktilkalptaru ke vyavaharik pakshon ka samikshatmak adhyayan: Dharmik evam rajnitik anshon ko chod kar. Vikram University.
2. Bhattacharyya, Bhupendranath. Theism in Samkhya system. University of Calcutta.
3. Chowdhury, Usha Kiran. Polity as depicted in the Sanskrit Mahakavyas of Kashmir. University of Jammu.
4. Das, Karunasindhy. Principal canons of interpretation (paribhasa) in the Paninian system of grammar. University of Calcutta.
5. Deb, Prodyut Kanti. Gopinath Dutt's Mahabharata-Stree parva: A critical study. Gauhati University.
6. Dwivedi, Kamala. A critical study of Dr. V. R. Nagar ke tantraloka. University of Udaipur.
7. Dwivedi, Ramadhar. Swatantryodayayapurna Sanskrit ka ahihsak aur samajik upanyason ka anusheelan. Ravishankar University.

8. Ghosh, Rekha. Studies in the contribution of Gopala Nyaya Pancanama as a digest-writer. University of Calcutta.
 9. Gogoi, Lakshira. Treatment of Lakṣana in Sanskrit poetics and philosophical literature. Gauhati University.
 10. Goswami, Narayanachandra. Vis is tadwaite Vedante yathar chakṣyati svarupam. University of Calcutta.
 11. Haldar, Ira. Kavi Karnapura's Caitanya-Caritamṛta and Caitanya Candrodya: A critical study. University of Calcutta.
 12. Jha, Dhanshwer. Pushpandanpranitiya Shiva Mahin-anstritaya Shivaistririteksu shānam M. M. Pradumanopadhyay kṛita prakasitṭi tikayaya. Kameshwar Singh Darbhanga Sanskrit University.
 13. Jha, Koshalendra. Gruhan Samiksha. Kameshwar Singh Darbhanga Sanskrit University.
 14. Jha, Ramchander. Grah vighnam. Kameshwar Singh Darbhanga Sanskrit University.
 15. Jha, Shankar Kumar. Diwaker Udbhāt sagaraya samalochanatmakamrdhyayanamhuvaddhashach. Kameshwar Singh Darbhanga Sanskrit University.
 16. Jha, Shrikrishna. Sankhya darshan ke shreshtata. Kameshwar Singh Darbhanga Sanskrit University.
 17. Mishra, Adityanath. Dandi Banbhartyortulmatma-kanadhyayanam. Kameshwar Singh Darbhanga Sanskrit University.
 18. Mohan Chand. The social condition as depicted in the Jain Sanskrit Mahakavyas. University of Delhi.
 19. Prabha Kiran. Shri Harsh ke rupakon ka alochanatmak adhyayan. University of Bihar.
- Prakrit**
1. Satpaty, Arjun. Prakrit inscriptions in Orissa. Sambalpur University.
- Hindi**
1. Ananth Kamal Nath. The comparative study of Bhakti literature of Astachap poets in Hindi and Daskut poets in Kannada Karnataka University.
 2. Dhasmana, Indu. Ritikaleen Satsai-kavya mein anubhaav yojana. University of Delhi.
 3. Gupta, V. S. Swatantryottar Hindi natak: Vikas aur shlp, 1947-70. University of Poona.
 4. Indira Devi, P. K. Poetical works of Sumitranandan Pant. University of Cochin.
 5. Kaul, Som Nath. Development and evaluation of post independence Hindi short story. University of Kashmir.
 6. Khosla, Neelam. Hindi ekanki mein nari ka swarup. University of Jammu.
 7. Mahato, Bhuwaneshwar. Hindi ekanki ka rangmanchiya anusheelan. Ravishankar University.
 8. Mishra, Girja Shankar. Tulsi sahitya ka nitiparak adhyayan. Kanpur University.
 9. Narasimha Rao, K. V. An analysis of the thought in Hindi novels after independence. Sri Venkateswara University.
 10. Pandey, Kailash Nath. Vastu charitra aur kala ke drishṭi se Tulsi kavya ka veshistaya. University of Saugar.
 11. Prabhashankar. T. G. Impact of Gandhism on modern Hindi poetry, 1930-1965. Karnatak University.
 12. Rai, Shyam Narain. Influence of Sanskrit Ram literature on Ramcharitmanas. University of Jammu.
 13. Raina, Ratna Kumari. Kashmir ka Hindi sahitya. University of Kashmir.
 14. Razdan, Phoolu Kumari. Kashmiri tatha Hindi Krishna kavya ka tulnatmak adhyayan. University of Kashmir.
 15. Sinha, Bharatkumar. Swatantryottar Hindi kavya mein jivan mulya. University of Poona.
 16. Sinha, Upendra Sharan Prasad. Devkimandan Khatri: Jivan aur sahitya. University of Bihar.
 17. Suraj Bhan Singh. Hindi vakya-sanchon ka bhasha-vaiyaynik adhyayan. University of Delhi.
 18. Thankamani, S. Amma. Modern Hindi khand kavyas, 1900-1970. University of Cochin.
 19. Verma, Sushama Kumari. Hindi kabani: Swarup aur shlp, 1960 A. D. University of Calcutta.
- Assamese**
1. Saikia, Purnananda. A study on Hiteswar Bor Borah: His mind and art with special reference to the growth of sonnet and epic poetry in Assamese. Gauhati University.
- Bengali**
1. Raychaudhuri, Prasit Kumar. Srichaitanyadev: Bharat Parikarma-o-jatiya sanhat. University of Calcutta.
- Marathi**
1. Bhosale, Dasharatha Tayapa. Ravikiran Mandalachi Kavita. Shivaji University.
 2. Javale, B. S. Bang aur unka sahitya. University of Poona.
 3. Lohar, R. M. Ahalyabai Holkar va tichi karkird. University of Poona.
 4. Madhita, William. The Hinkar Konkani of South Kanara: A linguistic analysis. Karnatak University.
- Oriya**
1. Mohanty, Manindra Kumar. Oriya shishu sahitya. Sambalpur University.
- Telugu**
1. Datta, K. Sethurameswara. A study of the life and works of Relamokonda Rama Raya kavi. Sri Venkateswara University.
 2. Ramasarma, Venkata Sundara. A study of the minor poetical works of Sri Viswanadha Satyanarayana. Andhra University.
- Geography**
1. Chakrabarti, Kanan. Location growth and future prospects of the cotton textile industry in West Bengal: A geo-economic appraisal. University of Calcutta.
- History**
1. Bimal, Indra Pal. History and administration of Chhattisgarh Province, 1854 to 1861. Ravishankar University.
 2. Chakrabarti, Gargi. Gandhi and the Hindu Muslim problems, 1919-29. University of Calcutta.
 3. Ghosh, Ratnabali. Aspects of seventeenth century Rajasthani paintings: A study of its cultural sources. University of Calcutta.
 4. Jana, K. C. Some aspects of socio-economic conditions of Orissa during the nineteenth century. Berhampur University.
 5. Majumdar, Archana. A survey of printed modes in Indian textiles from Indus Valley civilization to late nineteenth century A. D. University of Calcutta.
 6. Mohammed Ashikullah Khan. The formation and administration of the central provinces from 1858 A. D. to 1870 A. D. Ravishankar University.
 7. Mukhopadhyay, Hasi. Political activity of the Liberal Party in India, 1919-1937. University of Calcutta.
 8. Varma, Sushama Jyotiprasad. Mount Stuart Elphinstone in Maharashtra, 1801-1827. University of Poona.

CURRENT DOCUMENTATION IN EDUCATION

EDUCATIONAL PHILOSOPHY

- "LITERACY As a way of life" (Editorial) *Change* 8(10); Nov 76: 8-10.
- Murchland, Bernard. "Eclipse of the liberal arts". *Change* 8(10); Nov 76: 22-6, 62.
- Tangulane, Sioma. "Education for individual fulfilment and social progress". *Unesco Chronicle* 22(9); Sept 76: 245-50.

EDUCATIONAL HISTORY

- Barnes, Barry and Shapin, Steven. "Head and hand: Rhetorical resources in British pedagogical writing, 1770-1850". *Oxford Review of Education* 2(3); 1976: 231-54.
- Gildea, Robert. "Education in nineteenth-century Brittany: Ille-et-Vilaine, 1800-1914". *Oxford Review of Education* 2(3); 1976: 215-30.

- Insler, Ian. "Social context of an educational movement: A revisionist approach to the English Mechanics institutes, 1820-1850". *Oxford Review of Education* 2(3); 1976: 277-307.
- K-plan, Martin. "Most important question". *Oxford Review of Education* 3(1); 1977: 87-94.
- Lacour, Thomas. "Cultural origins of popular literacy in England, 1500-1850". *Oxford Review of Education* 2(3); 1976: 255-75.
- Morris, Norman. "Public expenditure on education in the 1860s". *Oxford Review of Education* 3(1); 1977: 3-19.
- Silver, Harold. "Aspects of neglect: The strange case of Victorian popular education". *Oxford Review of Education* 3(1); 1977: 57-69.
- Simon, Joan. "History of education in past and present". *Oxford Review of Education* 3(1); 1977: 71-86.
- Webster, Charles. "Changing perspectives in the history of education". *Oxford Review of Education* 2(3); 1976: 201-13.
- Wilson, Ian C. "Education and politics: The education policy of the German Social Democratic Party, 1906-1922". *Oxford Review of Education* 3(1); 1977: 37-56.

EDUCATIONAL SOCIOLOGY

- Amrik Singh. "Youth activity in the universities". *University News* 15(6); 16 Mar 77: 139-40, 166.
- Sharma, G. D. "Brain drain". *University News* 15(7); 1 Apr 77: 174.
- Young, Robert B. "Educating the average". *Change* 8(10); Nov 76: 52-3.

EDUCATIONAL ADMINISTRATION

- REPORT OF the first seminar on the management of education systems. *Centre for Educational Policy and Management Bulletin* Dec 76: 1-15.

CURRICULUM

- Jackson, Daphne. "New type of game demands new types of rules". *Times Higher Educational Supplement* (285); 8 Apr 77: 11.
- Santanapopalan. "Role of universities in environmental studies". *University News* 15(7); 1 Apr 77: 172-3.

TEACHING

- Bach, G. L. "Economics for the many". *Change* 9(1); Jan 77: 6-7.
- Bejar, Isaac I. and Doyle, Kenneth O. "Effect of prior expectations on the structure of student ratings of instruction". *Journal of Educational Measurement* 13(2); Summer 76: 151-4.
- Binzen, Peter. "Gamesmanship in macroeconomics". *Change* 9(1); Jan 77: 16-19.
- Centra, John A. "Influence of different directions on student ratings of instruction". *Journal of Educational Measurement* 13(4); Winter 76: 277-82.
- Footlick, Jeerold K. "Self-paced calculus grows up". *Change* 9(1); Jan 77: 36-9.
- Jenkins, Evan. "Should cincinnatti bell charge extra: A case study approach to economics". *Change* 9(1); Jan 77: 8-10.
- Kane, Michael T. "Student evaluations of teaching: The generalizability of class means". *Journal of Educational Measurement* 13(3); Fall 76: 171-83.
- Livesey, Herbert B. "Renovating introductory economics". *Change* 9(1); Jan 77: 20-3.
- MacEoin, Gary. "From the concrete to an appreciation of the abstract". *Change* 9(1); Jan 77: 32-5.
- Margolis, Richard J. "Steps toward ethical maturity". *Change* 9(1); Jan 77: 50-3.
- McNamara, William. "Classical to the core: The Havford approach". *Change* 9(1) Jan 77: 58-61.
- Meeth, L. Richard. "What is improved teaching?" *Change* 9(1); Jan 77: 4-5.
- Miller, Judith. "Brightening the dismal science". *Change* 9(1); Jan 77: 12-15.
- Pohlmann, John T. and Elmore, Patricia B. "Instructional improvement questionnaire". *Journal of Educational Measurement* 13(2); Summer 76: 161-3.
- Schneewind, J. B. "Philosophy teaching: More questions than answers". *Change* 9(1); Jan 77: 48-9.
- Sieat, Angela. "Can math anxiety be conquered?" *Change* 9(1); Jan 77: 40-3.
- Sieart, Donald C. "Unteachable subject". *Change* 8(10); Nov 76: 48-51, 63.

- Sugnet, Charles J. "Philosophy mixes with technology". *Change* 9(1); Jan 77: 54-7.
- Weil, Henry. "Making the subject behave". *Change* 9(1); Jan 77: 62-3.
- Willcox, A. B. "To know it not to teach". *Change* 9(1); Jan 77: 26-7.
- Zwerling, L. Steven. "Developmental math with a difference". *Change* 9(1); Jan 77: 28-31.

EVALUATION

- Bartsch, Thomas W. "Manipulative study of the effect of instructional set on the convergent and discriminant validity of questionnaire measures of trait and state anxiety: A comparative factor analytic approach". *Educational and Psychological Measurement* 36(4); Winter 76: 885-98.
- Cardinet, Jean etc. "Symmetry of generalizability theory: Applications of educational measurement". *Journal of Educational Measurement* 13(2) Summer 76: 119-35.
- Garvin, Alfred D. "Simple, accurate approximation of the standard error of measurement". *Journal of Educational Measurement* 13(2); Summer 76: 101-5.
- Hoffman, Kaaren I. and Lundberg, George D. "Comparison of computer monitored group tests with paper-and-pencil tests". *Educational and Psychological Measurement* 36(4); Winter 76: 791-809.
- Linn Robert L. "Response models and examinee behaviour: A note on the lack of correspondence". *Educational and Psychological Measurement* 36(4); Winter 76: 835-41.
- Lueptow, Lloyd B. etc. "Validity of student evaluations of objective test items". *Educational and Psychological Measurement* 36(4); Winter 76: 939-44.
- Shani, Esther and Petrosko, Joseph M. "Structural components derived from evaluating standardized tests". *Journal of Educational Measurement* 13(4); Winter 76: 283-96.
- Singhal, R. P. "Replacing marks by grades". *University News* 15(6); 16 Mar 77: 141-3.
- Subkoviak, Michael J. and Roeske, Alan L. "Closer look at the accuracy of alternative data-collection methods for multi-dimensional scaling". *Journal of Educational Measurement* 13(4); Winter 76: 309-17.
- Wagner, Edwin E. and Daubney, John H. "Position error in rating". *Educational and Psychological Measurement* 36(4); Winter 76: 825-8.
- Wood, Robert. "Inhibiting blind guessing: The effect of instructions". *Journal of Educational Measurement* 13(4); Winter 76: 297-307.

ECONOMICS OF EDUCATION

- Nahata, S. M. "Job oriented education scheme". *University Affairs* 15 Feb 77: 11-14.

ADULT EDUCATION

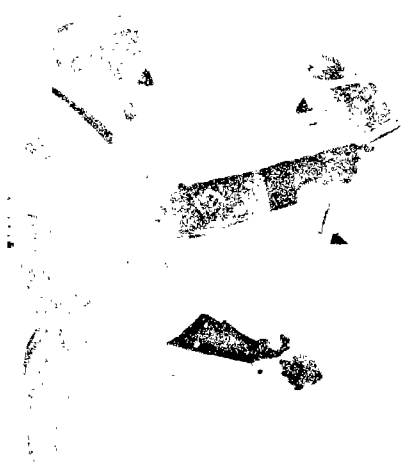
- ADULT and continuing education in Britain. *A. C. U. Bulletin of Current Documentation* (28); Apr 77: 10-12.
- Ram Shankar. "Comparative study of two adult literacy primers". *Indian Journal of Adult Education* 38(1); Jan 77: 28-36.
- Venkataiah, N. "Some thoughts about research in adult education". *Indian Journal of Adult Education* 38(1); Jan 77: 40-3.

COUNTRY STUDIES

- ASIAN PROGRAMME of educational innovation for development. *World in the Classroom* July-Sept 76: 18-22.
- HIGHER EDUCATION and training in Canada. *University Affairs* 15 Feb 77: 15-18.
- HIGHER EDUCATION and training in Canada. *University Affairs* 15 Mar 77: 15-18.
- Keller, Thomas. "European centre for higher education". *Unesco Chronicle* 22(10); Oct 76: 283-6.
- M'Row, Amadou Mahtar and Fouré Edgar. "Linking school and life in Africa". *Unesco Features* (711); 1976: 1-5.
- Moorman, Paul. "Learning by rote in a land where party is not state". *Times Higher Education Supplement* (285): 8 Apr 77: 9.
- Talledo, Rolando Andrade. "Education is everybody's job". *Unesco Features* (700-702); 1976: 22-3.

University News

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Dr. S. Chandrasekhar, Vice-Chancellor of Annamalai University,
receiving the Bicentennial Gold Medal from Dr. Everett Kleinjans,
Chancellor, East-West Centre at Honolulu.